



DOCTOR OF CLINICAL PSYCHOLOGY (DCLINPSY)

Doctorate in Clinical Psychology: Main Research Portfolio

1) Guidance for Authors, Journal of Obsessive Compulsive and Related Disorders; 2) Service Responses to Findings and Recommendations 3) T-test comparisons of participants in eating disorder group with and without comorbid depression on questionnaire measures, and VAS ratings before and after experimental tasks.

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Research Portfolio submitted in part fulfilment of the requirements for the Degree of Doctorate in Clinical Psychology: Volume 1 of 2

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Doctorate in Clinical Psychology

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May 2014

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Abstracts

Main Research Project:

Self-critical thinking and overgeneralisation in depression and eating disorders: An experimental study

This study investigated the hypothesis that self-critical thinking plays an important role in 'overgeneralisation' where specific negative experiences result in more global negative self-views (sometimes known as 'core beliefs' or 'schemas'). Two experimental tasks, one involving word puzzles of varying difficulty, and one focused on body image, were used to elicit self-critical thoughts in participants with depression (n=26), eating disorders (Anorexia, Bulimia and ED-NOS; n=26) and nonclinical participants (n=26). As predicted, following failure experiences on the word puzzle task, the clinical groups showed greater global negative self-views, controlling for baseline scores, compared to controls. Both habitual and increases in state self-critical thinking was associated with overgeneralisation while negative perfectionism was not. As predicted from Barnard and Teasdale's (1991) Interacting Cognitive Subsystems model, increased global negative self-views were more strongly associated with post-task lowering of mood than self-criticism. Unexpectedly, participants with eating disorders did not report significantly more appearance-related self-criticism or greater global negative self-views after the body image task than the other groups. Overall, the findings are consistent with the suggestion that self-criticism may play an important role in the activation of global negative self-views after a specific negative experience, and this overgeneralisation may in turn result in low mood.

Keywords: Self-criticism, depression, eating disorder, overgeneral, failure, perfectionism

Service Improvement Project:

Service user perspectives on the use of outcome measures in psychological therapy

Despite much research into the benefits of outcome measurement, service user opinions on this as part of the therapy process have not been investigated. This study aimed to assess service users' experiences of completing measures during psychological therapy, with a view to exploring how therapists can maximise how helpful measures are in therapy. Fifteen participants completed surveys about the use of measures in their current episode of care. Results showed that despite mixed experiences in how measures were explained and used, service users showed generally favourable attitudes towards their use in therapy, with them being perceived as most helpful when well integrated into

sessions by their therapists. Implications for clinical practice, service development, and further research are discussed.

Keywords: outcome measures, service user views, questionnaires, therapy, routine outcome measurement

Critical Literature Review:

Hoarding among older adults: An evaluative review

This article presents an evaluative review of the literature on hoarding in older adult populations. Interest in hoarding is growing rapidly, with significant media attention and the inclusion of 'hoarding disorder' in DSM-5. Studies are now beginning to examine the phenomenon within particular client groups. This article aims to synthesise and examine research findings regarding older adults with hoarding problems. Database and journal searching revealed a small but growing body of work in this area, which was reviewed with respect to a number of theoretical issues. The reviewed studies tended to rely on purely descriptive methodologies, meaning that typical case presentations and circumstances are well documented but underlying causal and maintenance mechanisms are less well understood. There is a clear need for longitudinal work and cross-sectional designs comparing age groups, utilising appropriate control groups where possible. Directions for future research in this area are suggested, along with consideration of how the current findings might inform generic theories and models of hoarding.

Keywords: Hoarding, ageing, older adults, review

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Critical Literature Review

Hoarding among older adults: An evaluative review

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Intended Journal: Journal of Obsessive Compulsive and Related Disorders

This journal has been chosen due to its specific focus on hoarding literature, and on review articles that aim to make valuable contributions to the field.

Hoarding among older adults: an evaluative review

Abstract

This article presents an evaluative review of the literature on hoarding in older adult populations. Interest in hoarding is growing rapidly, with significant media attention and the inclusion of 'hoarding disorder' in DSM-5. Studies are now beginning to examine the phenomenon within particular client groups. This article aims to synthesise and examine research findings regarding older adults with hoarding problems. Database and journal searching revealed a small but growing body of work in this area, which was reviewed with respect to a number of theoretical issues. The reviewed studies tended to rely on purely descriptive methodologies, meaning that typical case presentations and circumstances are well documented but underlying causal and maintenance mechanisms are less well understood. There is a clear need for longitudinal work and cross-sectional designs comparing age groups, utilising appropriate control groups where possible. Directions for future research in this area are suggested, along with consideration of how the current findings might inform generic theories and models of hoarding.

Keywords: Hoarding, ageing, older adults, review

Introduction

Hoarding has been defined as "the acquisition of, and failure to discard, possessions which appear to be useless or of limited value" (Frost & Gross, 1993, p. 367). The definition of hoarding is a complex task, with a number of significant issues. For example Frost and Gross's (1993) highlights the subjective nature of the value of possessions, raising the question of who is to decide when an item has 'limited value'. Additionally, hoarding definitions are often not clear on the distinction between collecting and hoarding (Nordsletten & Mataix-Cols, 2012). They may also be criticised as relying too heavily on situational criteria such as living conditions, and paying insufficient attention to the salient aspects of mental health that may underlie the condition. Theoretically it is possible for someone with hoarding difficulties to move their clutter somewhere else such as storage, or live somewhere apart from the hoard, which may prove problematic for some definitions.

As it is not straightforward to address issues such as these, research into hoarding difficulties tends to make use of more operational definitions, such as that of Frost and Hartl (1996) who proposed three main criteria: 1) the acquisition of, and failure to discard a large number of possessions that appear to be useless or of limited value; 2) living

spaces sufficiently cluttered so as to preclude activities for which those spaces were designed; and 3) significant distress or impairment in functioning caused by the hoarding.

However the condition might be defined, there are a number of behaviours and features common to hoarding. Perhaps the most fundamental is the excessive accumulation of possessions, such as clothes, books, papers, animals (Reinisch, 2009), and sentimental objects (see Mogan, Kyrios, Schweitzer, Yap, & Moulding, 2012). This can be a consequence of over-acquisition, under-discarding, or both. While there is some evidence to suggest a relationship between hoarding and compulsive buying (Frost, Steketee, & Williams, 2002), a review by Lejoyeux and Weinstein (2010) highlights some key distinctions between the two, for example the suggestion that compulsive buyers may attend more to the act of buying rather than what is bought, which is not the case for those who hoard.

There is little in the way of quantitative data regarding these issues, however Kellett and colleagues (2010) used Interpretive Phenomenological Analysis to explore hoarding features and the experiences of hoarders. They highlighted the presence of strong connections to the hoarded items, either through sentimentality, perceived utility, or their ability to evoke memories. In relation to discarding they emphasised the common presence of 'churning' (tidying an area by moving the possessions to another place), and a sense of being so overwhelmed by the number of possessions that any attempts to discard proceed extremely slowly and seem to make little difference overall. The personal impact was significant, with many hoarders reporting feeling shame and embarrassment, and describing a negative impact on relationships with family and friends.

Hoarding also entails a high degree of risk through fire, infestation, malnutrition and other physical health conditions, and as such represents a significant burden on public resources (Tolin, Frost, Steketee, Gray, & Fitch, 2008). It is common that those with hoarding problems are known to councils or other local authorities, and in this study 8-12% of the sample had been evicted or threatened with eviction from their homes due to clutter.

Conceptually, there are a number of ways of viewing hoarding difficulties, ranging from purely biological and genetic perspectives, to those based on life experiences, or mental health difficulties such as obsessive-compulsive disorder (OCD). Clearly these are not mutually exclusive and may interact.

Biological/Genetic Perspective

Hoarding has been demonstrated to show significant heritability, with one twin study (Iervolino et al., 2009) finding that genetic factors accounted for approximately half the variance in compulsive hoarding. There is also some evidence suggesting that first-degree relatives of hoarders are more likely to show hoarding behaviours themselves (Pertusa et al., 2008; Samuels et al., 2002). Considering why hoarding may show a genetic component, Kellett (2007) discusses the 'security hypothesis' drawn from animal literature that it is biologically advantageous for species to hoard resources to ensure their survival in times of hardship, therefore being able to pass on their genes.

Neuropsychology Perspective

Grisham and colleagues (2007) reviewed papers exploring cognitive difficulties associated with symptoms of compulsive hoarding, which include problems with the organisation and recall of visual information, recall of verbal information, deficits in categorising and organising information, and impaired decision making (see also Grisham, Norberg, Williams, Certoma, & Kadib, 2010). Their own experiments suggested that a slower reaction time and increased impulsivity were most linked to hoarding symptomatology. There is some support for the notion of attentional deficits in hoarding (Tolin, Villavicencio, Umbach, & Kurtz, 2011), with some studies suggesting an association with ADHD (Hartl, Duffany, Allen, Steketee, & Frost, 2005; Sheppard et al., 2010).

OCD Perspective

Hoarding has traditionally been conceptualised as an aspect of OCD with approximately one-third of OCD clients demonstrating hoarding behaviours (Frost, Krause, & Steketee, 1996). It is suggested that in some cases, people's hoarding is motivated by concerns that throwing something away may result in catastrophic consequences such as harm coming to themselves or others (Pertusa et al., 2008). More recently it has been argued that hoarding should be considered as a clinical problem in its own right (Rachman, Elliott, Shafran, & Radomsky, 2009), with OCD and hoarding being separated empirically (Gordon, Salkovskis, & Oldfield, 2013). As a result, 'Hoarding Disorder' is now an individual category in DSM-5 (see Mataix-Cols et al., 2010; Mataix-Cols & Pertusa, 2012; Saxena, 2007).

Cognitive-behavioural Perspective

This suggests that hoarding is driven by beliefs about the nature of possessions, their value, and the purpose of saving, and that these beliefs may have become exaggerated

or biased over time. Frost and Hartl (1996) reported that people may show a marked need to maintain control over their possessions, feeling responsible for their protection, and are therefore less able to share or have people handle them (see also Frost, Hartl, Christian, & Williams, 1995). Measures such as the Saving Cognitions Inventory (Steketee, Frost, & Kyrios, 2003) have been used to show differences in beliefs between those who do and do not hoard (e.g. Luchian, McNally, & Hooley, 2007).

Attachment Perspective

It is suggested that attachment problems in early life can mean that possessions can be afforded a much higher level of emotional significance (Seaman, Oldfield, Gordon, Forrester, & Salkovskis, 2010). Consequently these become very difficult to discard since this could be seen as losing “a part of myself and my life” (p.159). Kellett et al. (2010) suggested that strict, rejecting, and authoritarian parenting may lead to a suppression of emotions. It could be hypothesised therefore that this may result in emotional material being displaced onto possessions from an early age. See Nedelisky and Steele (2009) for further discussion of links between attachment and hoarding.

Material Deprivation Perspective

Seaman and colleagues (2010) outlined a perspective that hoarding may be motivated by having experienced a period of significant deprivation from material belongings. They suggested that this may provide strong motivation to acquire or keep possessions to prevent this occurring again. However, Landau and colleagues (2011) found no link between the two, suggesting deprivation alone may be insufficient to trigger hoarding.

Stressful Life Events Perspective

Studies have often suggested a link between experiencing stressful life events (such as bereavement, relationship break-up, crime, disaster, or traumatic physical/sexual experiences) and the onset or worsening of hoarding symptoms (Landau et al., 2011; Tolin, Meunier, Frost, & Steketee, 2010). While the mechanism of this is not clear, there is some evidence to suggest a high frequency of ‘possession-related’ events, such as having possessions taken by force or being evicted from a property (Tolin et al., 2010), which arguably show a more direct association with hoarding behaviours.

The theories and models being developed in this area generally use combinations of these perspectives to try and provide coherent accounts of hoarding development and maintenance. For example, the cognitive-behavioural model of hoarding described

originally by Frost and Hartl (1996) suggests four main areas that underpin hoarding: Information processing deficits, emotional attachment problems, behavioural avoidance, and unhelpful beliefs about the nature of possessions. Clearly this incorporates a range of cognitive, neuropsychological, behavioural, and attachment viewpoints, and has some good empirical support (Steketee & Frost, 2003) but it could be argued that the model does not adequately account for the development of hoarding problems, being more maintenance-focused.

The reverse is perhaps true of the theoretical dimensions of hoarding outlined in Seaman and colleagues' (2010) paper. They focus more on the development of hoarding, suggesting there is heterogeneity among causes i.e. that distinct factors such as the avoidance of harm, early material deprivation, and disturbances of attachment may all lead to a final common pathway of hoarding behaviours. Maintenance processes are not described here, but are explored further in Gordon et al. (2013), with discussion of lack of social interaction (see Frost & Gross, 1993) and intolerance of uncertainty (see Oglesby et al., in press) as possible maintaining factors.

It is perhaps important to bear in mind that the hoarding of possessions is a behaviour like any other and there may be a wide variety of circumstances and motivations for this (see Wu, 2011). At most, hoarding behaviours represent a symptom of underlying difficulties which could arise from multiple aetiologies and this is potentially problematic for research and the diagnostic classification of hoarding and OCD.

Given that many of the perspectives outlined relate to innate and/or early life experiences, questions around the chronology of hoarding are raised, such as whether and why there might be a distinction between the age of onset, and age of presentation, of hoarding problems. We know that mental health conditions often change over the lifespan, though consistent patterns of change are not always evident (Jorm, 2000). There may be changes in problem severity or presentation, perhaps in response to life events, but also due to the ageing process more generally. As a result, the presentation of hoarding problems in older adults may reflect problems caused by the chronicity of the condition (e.g. extent of clutter, beliefs about the possibility of change), which may be being confounded with the processes involved in its development and maintenance. With anxiety disorders generally, some studies suggest that problems decline or 'burn out' during later life (Jorm, 2000), but others highlight the high prevalence rates of anxiety within older populations (Beekman et al., 1998; Halbreich, 2003; Krasucki, Howard, & Mann, 1998; Manela, Katona, & Livingston, 1996) and suggest that cohort effects, poorer

detection rates, anxiety-related mortality, and comorbidity with cognitive impairment may be underlying any apparent reductions in prevalence. The lack of longer term longitudinal work means that ageing effects and cohort effects cannot be effectively distinguished at present (Jorm, 2000).

Ageing may have a number of effects on hoarding processes and behaviours. Some hypotheses are listed below:

- A longer period of accumulation may mean that clutter problems are more severe
- Later life can be associated with greater disposable income, which may facilitate acquisition of possessions
- Cohort effects, such as experiencing wartime and post-war living conditions, and associated attitudes to possessions such as 'make do and mend', may impact on hoarding behaviours
- Age-related cognitive decline may impact on the nature and strengths of people's beliefs about possessions and their emotional significance
- Older adults are likely to have experienced more stressful life events, which may exacerbate or initiate hoarding behaviours
- The core hoarding psychopathology may have reduced with age, but the person is left with problematic 'side-effects' e.g. clutter, feeling of hopelessness

Exploring the above may have important implications for theoretical and empirical work in hoarding, and as such this paper aims to review the older adult hoarding literature in relation to the following questions:

- What is the prevalence of hoarding in older adults, and how does this fit with the idea of 'anxiety burnout'?
- What are the common demographic features of older adults with hoarding problems?
- Given that theoretical accounts tend to emphasise the role of early life experiences, is hoarding in later life predominantly a chronic problem with an early age of onset, or is late-life onset common?
- Given that theoretical accounts tend to emphasise the role of information processing and cognitive functioning deficits more generally, might we expect an increase in hoarding symptoms associated with age-related cognitive decline?
- Are hoarding difficulties in later life more severe? Is this due to progressive accumulation of items over time, or are motivating beliefs and anxieties also stronger?

- Is there a link between stressful life events and later-life hoarding?
- What are the help seeking behaviours within this group?
- What implications do the above have for theoretical accounts and models of hoarding?

Given that research into hoarding problems is still relatively recent, and work with specific age groups even more so, it is hoped that this review will be able to offer an effective and timely synthesis of findings in the field, and highlight the areas that would benefit from further investigation.

Method

Design

This is an evaluative review, aiming to draw together the literature within this population group and explore and synthesise common findings. This form of review was chosen as it was felt that the field needs further conceptual and phenomenological clarity before more interventive research can be undertaken.

Search Protocol

Broadly, the search protocol followed systematic procedures to ensure as much relevant literature as possible was obtained. Searches aimed to identify published papers on hoarding among older adult (i.e. predominantly over 65) populations. Papers were required to have undergone peer-review, and could consist of empirical studies, reviews, case studies or series, or conceptual/theoretical papers. Year of publication was not set as a search criterion due to the relative recency of the field. A variety of medical, psychological, and nonspecialised databases were searched (e.g. MEDLINE, APA PsycNet, Scopus, National Library for Health, Web of Knowledge, Cochrane, Google Scholar), and reference trails from obtained papers were followed. Searches were conducted and updated between February 2012 and April 2013.

Search terms incorporated accepted synonymous words or phrases to minimise the risk of missing relevant material (i.e. hoarding/"compulsive hoarding"/"obsessive hoarding"/"obsessional hoarding"/"hoarding disorder"; "older adult"/"late life"/"later life"/gerontology/geriatrics/ elderly/aged). Mesh terms were also used, and specific journals searched (including: Journal of Gerontological social work, International Journal of Geriatric Psychiatry, Geriatrics and Gerontology International, International Journal of Aging and Later Life, Journal of Anxiety Disorders, Journal of Obsessive Compulsive and Related Disorders). Additionally, descriptive case-based articles from the wider hoarding

literature were searched for material pertaining to older adults (e.g. an older adult described as part of a case series).

Data Extraction

Studies were assessed for findings relating to the review questions described above. While the variety of article types meant that systematically reviewing article quality was not possible, findings were analysed from a critical perspective and any limitations of studies considered when synthesising findings.

Results

Searches returned approximately 700 articles, from which duplicates and non-human studies were removed. Titles and/or abstracts of the remaining 367 articles were reviewed for relevance to the review topic. A total of 38 articles were identified, which were obtained in full-text and included in the review. The number of articles pertaining to each of the review aims is shown in Table 1.

| Review Aims | Number of Articles |
|--|---------------------------|
| Prevalence | 9 |
| Risk Factors and Demographics | 11 |
| Age of Onset and Chronicity | 7 |
| Dementia, Memory and Cognitive Decline | 10 |
| Extent of Hoard and Severity of Symptoms over Time | 4 |
| Stressful Life Events | 8 |
| Help-seeking Behaviours | 11 |

Table 1. The number of reviewed articles reporting or discussing information pertaining to each of the aims of the present review.

Prevalence

The most frequently cited prevalence study of hoarding in adults was undertaken by Samuels and colleagues (2008) who reported that 3.7% (5.3% weighted) of the general population in eastern Baltimore show 'pathological' hoarding behaviours. They noted that the prevalence among older people (6.2% aged 55-94) was nearly three times greater than the youngest group sampled (2.3% aged 34-44). They also found it to be twice as

common in men than women, a finding inconsistent with other literature (see 'Risk Factors and Demographics'). Prevalence estimates from other studies are generally consistent with this, with both adult and older adult rates around 5-6% (Mueller, Mitchell, Crosby, Glaesmer, & De Zwaan, 2009; O'Sullivan et al., 2010; Stein, Laszlo, Marais, Seedat, & Potocnik, 1997).

The idea that hoarding is more prevalent among older adults compared to working-age adults seems to go against the general pattern of 'anxiety burnout' as age increases (see Jorm, 2000). Jorm makes the important point however that this declining pattern can be easily and significantly masked by the influence of covarying risk factors such as marital status, gender, level of education, income, and employment status. The anxiety burnout trend is only visible when these factors are statistically controlled for, something not done in the reviewed studies. Alternatively it may be true that hoarding is an exception to the rule, in that it only becomes a problem in later life due to the accumulation of possessions. More rigorous age comparison studies are required to ascertain clearly whether hoarding fits the general pattern.

The consistency in prevalence estimates is surprising given the variation in how hoarding is defined across different studies. Samuels et al. (2008) defined pathological hoarding as whether the hoarding criterion within the Obsessive Compulsive Personality Disorder (OCPD) DSM-IV category was met. Other definitions include reaching a cutoff on the German Compulsive Hoarding Inventory (Mueller et al., 2009), or simply the presence of hoarding behaviours that cause distress or functional impairment (Stein et al., 1997). As might be expected, some studies that use much broader hoarding definitions such as 'the presence of a hoarding or hiding behaviour several times per week' (see Marx & Cohen-Mansfield, 2003) found much higher prevalence estimates, in this case 25% within their community sample (see also Ellis, Mullan, & Worsley, 2011, who reported high prevalence rates of medication hoarding).

Studies that have explored hoarding in the context of neurodegenerative and other conditions have tended to find much higher prevalence rates, such as 22.6% in dementia patients (Hwang, Tsai, Yang, Liu, & Ling, 1998), 13% in older adults with later life depression (Mackin, Areán, Delucchi, & Mathews, 2011), and 27.8% in people with Parkinson's Disease, where impulsive-compulsive behaviours are also displayed (O'Sullivan et al., 2010).

The lack of consistent definitions and approaches to the assessment of hoarding difficulties perhaps calls into question the validity of these prevalence estimates. It remains to be seen whether the new DSM-5 criteria will improve or exacerbate this issue. A further point for consideration is the conceptual clarity within the prevalence literature. Some studies view hoarding as a manifestation of 'self-neglect' (also referred to in the literature as living in squalor, or Diogenes Syndrome)(see Dong, Simon, Mosqueda, & Evans, 2012). Others view self-neglect not as the underlying problem, but a consequence of hoarding (see Maier, 2004 for discussion). It could be argued therefore that it is unwise to be conducting prevalence studies at all until some clarity is achieved as to what should and should not be considered hoarding.

Risk factors and demographics

A number of studies have looked at the broad demographics of older people with hoarding problems. These suggest that the majority are female, with proportion estimates ranging between 73% and 86% (Chapin et al., 2010; Kim, Steketee, & Frost, 2001; Marx & Cohen-Mansfield, 2003). However, it could be argued that these figures are an artefact of longer life expectancy for women, in that as age increases, there are relatively more women than men in the population to present to, or come to the attention of, services for hoarding problems. It seems that when a wider age range is sampled, gender differences are not present (Mueller et al., 2009), though replication would help to establish this more clearly.

The literature generally reports that older hoarders tend to be widowed, divorced, or never married (Andersen, Raffin-Bouchal, & Marcy-Edwards, 2008; Chapin et al., 2010; Kim et al., 2001). There is some evidence suggesting it is common for these people to be living alone (Ayers, Saxena, Golshan, & Wetherell, 2010; Kim et al., 2001), though one study that incorporated an older adult nonhoarding control group suggested this may be no more frequent than in the general population (Steketee, Schmalisch, Dierberger, DeNobel, & Frost, 2012). It is suggested that future studies utilise control groups to ensure that participants experiencing hoarding difficulties can be described in context rather than in isolation.

Other potential 'risk-factors' for hoarding problems in later life include social isolation (Andersen et al., 2008; Ayers et al., 2010; Chapin et al., 2010; Samuels et al., 2008), comorbid physical or mental health problems (Ayers et al., 2010; Calamari, Pontarelli, Armstrong, & Salstrom, 2012; Chapin et al., 2010; Lee & LoGiudice, 2012; Stein et al., 1997), and estrangement from family (Franks, Lund, Poulton, & Caserta, 2004; Thomas, 1998). However, some studies (Marx & Cohen-Mansfield, 2003; Steketee et al., 2012)

suggest these factors are perhaps more age-related than they are hoarding-related. These factors cannot be considered 'risk-factors' at all until a direct and statistically-sound association with hoarding is demonstrated; again the use of control groups in these studies is critical.

Age of onset and chronicity

The literature is generally consistent in reporting that a significant proportion of older adults with hoarding problems first showed symptoms of hoarding behaviours in childhood or adolescence, with estimates ranging from 34.6% to 83% (Ayers et al., 2010; Grisham, Frost, Steketee, Kim, & Hood, 2006; Steketee et al., 2012; Tolin et al., 2010). Ayers and colleagues (2010) suggested that "Compulsive hoarding is a progressive and chronic condition that begins early in life" (p.142), and the chronicity of problems is supported by other studies who make use of retrospective interviews and 'hoarding timelines' (Grisham et al., 2006; Steketee et al., 2012; Tolin et al., 2010).

What is not considered however, is the question of base rates, i.e. what proportion of children and adolescents in the general population show hoarding type behaviours, and how commonly do these transition into difficulties in adulthood? If this is extremely common among young people, it is not surprising that most older adults can recall childhood experiences of this type, and these experiences may not be causally linked to the 'onset' of hoarding problems. An additional complicating factor is the possibility of bias during retrospection. It may be for example, that the process of being interviewed about your history of hoarding problems may encourage the expression of childhood experiences. Retrospective designs are clearly pragmatic for many of the studies in this review, but longitudinal work is an obvious need within the literature.

The notion of late onset hoarding seems more controversial, with some studies (Ayers et al., 2010) ruling this out, and others (Steketee et al., 2012; Tolin et al., 2010; Turner, Steketee, & Nauth, 2010) suggesting this does occur in a minority of cases. Some case reports describe late onset, such as the case described in Cermele et al. (2001) whose difficulties began when she was approximately 62. Not all case reports describe the development and history of hoarding behaviours, and this is therefore recommended. There is some support for a bimodal distribution of onset ages, with peaks around adolescence and approximately age 50 (see Steketee et al., 2012). However, the definition of 'onset' needs clarity, as the reviewed papers do not always state their criteria to determine this, and sometimes conflate the onset of saving behaviours with the onset of a hoarding problem.

In late onset cases, it would be helpful to explore in detail the ‘triggers’ surrounding this. Tolin and colleagues (2010) suggested that the presence of close family members has an inhibitory effect on hoarding, meaning that hoarding becomes unconstrained when these people are no longer present (through bereavement, divorce, moving away). The Cermele et al. (2001) case report is consistent with this, and it is questioned whether all instances of late onset hoarding reflect the removal of limitations to a pre-existing hoarding tendency, rather than a genuine ‘onset’ of symptoms.

Dementia, memory and cognitive decline

There is currently a small body of research exploring hoarding behaviours in the context of neurodegenerative conditions such as Parkinson’s Disease (O’Sullivan et al., 2010) and various dementias (Hwang et al., 1998; Marx & Cohen-Mansfield, 2003; Stein et al., 1997). Additionally, a number of case reports describe people with dementia (Baker, LeBlanc, Raetz, & Hilton, 2011; Franks et al., 2004; Lee & LoGiudice, 2012; Thomas, 1998).

One criticism of this work is that at times, the implicit assumption is made that hoarding is explained by dementia. As a result, descriptions of participants’ histories and pre-dementia hoarding behaviours are often insufficient or absent altogether. While it may be true that hoarding behaviours may have multiple aetiologies, and dementia could be one of these (Stein et al., 1997 could be seen as supporting this view), case reports such as Shroepfer et al. (2001) highlight that childhood experiences and saving-related beliefs may still be present in, and pre-date the onset of, dementia.

Other studies have taken a neuropsychological approach, assessing cognitive function among individuals with hoarding problems. Kim and colleagues (2001) found that the majority of their sample (76%) showed no cognitive problems or problems with memory (67%). Where deficits are identified they tend to be in the areas of memory (Ayers, Bratotiis, Saxena, & Wetherell, 2012; Ayers et al., 2013; Hogstel, 1993; Mackin et al., 2011), processing speed (Mackin et al., 2011) and executive functioning, specifically categorisation and sorting (Ayers et al., 2013; Mackin et al., 2011), planning, problem solving, and flexibility (Ayers, Bratotiis et al., 2012). It is suggested that these deficits may underlie people’s limited responses to current CBT treatment protocols (Ayers, Bratotiis et al., 2012; Ayers, Wetherell, Golshan, & Saxena, 2011).

Taken in isolation, the reported cognitive deficits offer little in the way of explaining hoarding behaviours (causally or otherwise). Some studies have hypothesised possible mechanisms as to why deficits might manifest in hoarding behaviours. Hogstel (1993) suggested that memory problems might mean it is difficult to discriminate between important and nonimportant objects. Other suggestions include the idea that hoarded objects hold useful information or memories that can be referred to if memory fails, or that hoarding is an activity that feels meaningful but requires little cognitive effort (Andersen et al., 2008).

However, without adequate baseline or premorbid measures of cognitive functioning, it is difficult to differentiate longstanding deficits from age-related ones. Again, without detailed information regarding participants' neurological and hoarding histories, we cannot be certain that the observed deficits are age-related at all, let alone being linked to the onset or worsening of hoarding.

Extent of hoard and severity of symptoms over time

Currently, there are very few studies assessing whether and how hoarding symptoms change over time. Defining the severity of a hoarding problem is complex, in that there are both situational (i.e. amount of clutter) and cognitive (beliefs about saving and possessions) factors to consider. While these two factors are moderately correlated (Reid et al., 2011), it is not possible to definitively infer one from the other.

Obviously the amount of hoarded possessions generally increases over time, and this can lead to people self-rating their hoarding as more severe (Ayers et al., 2010). However, Reid and colleagues (2011) studied nonclinical older adults and found no correlations between age and either hoarding behaviours or hoarding cognitions. They suggest this finding may have been limited by the truncated age range of participants, so lifespan work is recommended.

There are theoretical reasons why hoarding problems may worsen with age, for example if the act of hoarding can provide "a sense of purpose and meaning to their lives" (Andersen et al., 2008, p. 211), it may become a more significant activity in older age, where some people are more functionally impaired (Ayers, Schiehser, Liu, & Wetherell, 2012) and feel increasingly isolated socially due to retirement, mobility problems, bereavement of partners/friends and other age-related factors. Tolin and colleagues (2010) suggested that the presence of others in the home has an inhibitory effect on hoarding, meaning that hoarding severity will increase if others are no longer present through divorce or death.

It is also possible that hoarding may be reinforced by the behaviour of others. Calamari and colleagues (2012) describe 'Ms. Smith', whose family would occasionally stop by her house to pick up items that they thought she might have. A reinforcement pattern such as this is likely to increase hoarding behaviours, and possibly cognitions, and therefore the problem severity over time. Other case reports describe a sense of things 'getting out of hand' once the person's age begins to limit their capacity to sort or categorise possessions (e.g. Thomas, 1998).

Given that hoarding is considered a mental health difficulty, it is surprising so few studies have explored the development of related beliefs and cognitions over time. This is a clear gap in the literature with a need for longitudinal work, or cross-sectional studies comparing age groups. These may have important implications for the development of effective psychological therapies for these problems.

Stressful life events

Overall, stressful life experiences are frequently reported among people with later-life hoarding problems. The case studies reviewed provide a good overview of the range of events experienced. These include bereavement of spouse, parent, or child (Calamari et al., 2012; Franks et al., 2004; Thomas, 1998), childhood sexual abuse (Franks et al., 2004), domestic violence (Cermele et al., 2001), loss of possessions in a house fire (Schroepfer & Ingersoll-Dayton, 2001), wartime experiences (Hogstel, 1993; Schroepfer & Ingersoll-Dayton, 2001) and family members moving away (Cermele et al., 2001). Other events reported include divorce, including multiple divorces (Franks et al., 2004) and being raised in an orphanage (Lee & LoGiudice, 2012), though it is not necessarily the case that these events were experienced as stressful. Other than the wartime experiences that are more specific to the older adult cohort, the presence and type of events experienced seem in line with that in the general hoarding literature.

Grisham and colleagues (2006) found that 55% of their sample of people with hoarding problems (aged 26-71) reported a stressful life event at the onset of symptoms, and only 19% of these were considered 'hoarding-related' (such as eviction, or loss of possessions). They stated that "Individuals who did not report a stressful life event at the time of onset of hoarding symptoms showed a significantly earlier age of onset than those who did" (p.682). While this study is perhaps limited by its retrospective design, it does seem to suggest that stressful events are not necessary, but could be sufficient, to trigger hoarding behaviours.

It is important to consider the idea that because older people have lived longer lives the probability of having experienced a stressful event is likely to be higher than average. This may artificially inflate their perceived association with hoarding within this client group. It is unclear as to whether the frequency and type of these events is different compared to older adults without hoarding problems, and this may warrant investigation.

Help seeking behaviours

Generally, the literature consistently finds that older adults with hoarding problems rarely seek help for these directly. Most clients come to the attention of services through other agencies such as the emergency services, local councils, animal protection organisations, and public health authorities (Chapin et al., 2010). Kim and colleagues (2001) found that 73% of referrals were made in this way, while 21% arose from direct complaints, 3% from service delivery workers, and the remaining 3% from self-referral.

It is common that people do not acknowledge there is a problem, with it being felt that they “will not perceive that they live in clutter, garbage, and filth” (Andersen et al., 2008, p. 210; see also Franks et al., 2004). Where a problem is identified it is a lack of storage space (e.g. Thomas, 1998). The literature frequently reports that people are “not willing to voluntarily receive treatment” (Thomas, 1998, p. 52), which is understandable if people do not find their living conditions distressing, even if others perceive this as clutter or squalor. This can lead to active refusal of and resistance to intervention (Koenig, Leiste, Spano, & Chapin, 2013; Lee & LoGiudice, 2012; Reinisch, 2009), and can result in agencies imposing fines and threats of prosecution on public health grounds (Lee & LoGiudice, 2012; Thomas, 1998).

Where direct help-seeking does take place, it may be delayed by shame and embarrassment about the person’s living conditions (e.g. Cermele et al., 2001) and seems to require the presence of a trusting relationship with a health professional (Koenig et al., 2013). The prevailing view in the literature is that multiagency and interdisciplinary working is recommended as the most effective method of intervention in these cases (Chapin et al., 2010; Koenig, Chapin, & Spano, 2010; Koenig et al., 2013; Lee, 2010; Poythress, Burnett, Naik, Sabrina Pickens, & Dyer, 2007; Whitfield, Daniels, Flesaker, & Simmons, 2012), though there are as yet no studies comparing different models of intervention. Further enquiry into hoarding stigma, the impact of media programming on public perceptions and treatment expectations, and barriers to help-seeking is recommended.

Results summary

Consideration of the above findings with reference to the original review questions is outlined in Table 2.

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| What is the prevalence of hoarding in older adults, and how does this fit with the idea of ‘anxiety burnout’? | This question cannot be confidently answered at present due to the lack of consistency in both hoarding definitions and the control of age-related risk factors for anxiety problems. |
| What are the common demographic features of older adults with hoarding problems? | There is reasonable consistency in the literature around the following factors: female gender, widowed/divorced/never married, living alone, social isolation, health problems, and estrangement from family. While this increases confidence in our understanding around this, controlled studies with the ability to partial out age-related factors are needed. |
| Given that theoretical accounts tend to emphasise the role of early life experiences, is hoarding in later life predominantly a chronic problem with an early age of onset, or is late-life onset common? | It can be stated that many older adults with hoarding difficulties have an early onset of symptoms. There is some support for the notion of late onset hoarding (approximately age 50). Clarity on the definition of onset is required, as are controlled studies with participants who have experienced onset of symptoms more recently. |
| Given that theoretical accounts tend to emphasise the role of information processing and cognitive functioning deficits more generally, might we expect an increase in hoarding symptoms associated with age-related cognitive decline? | While there is some, but mixed, evidence suggesting cognitive deficits in older adults with hoarding problems, no studies have effectively examined change in hoarding symptoms over time in clinical samples. Hoarding can occur in the context of neurodegenerative conditions. Longitudinal or cross sectional (by age) studies would help to address this question. |

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| Are hoarding difficulties in later life more severe? Is this due to progressive accumulation of items over time, or are motivating beliefs and anxieties also stronger? | These questions cannot be answered with confidence at present due to a lack of studies. It is thought that hoards do generally increase over time, but insufficient research attention has been given to the beliefs and cognitions underpinning hoarding, and how these may develop over time. |
| Is there a link between stressful life events and later-life hoarding? | While stressful life events are commonly reported among the reviewed studies' participants, no clear mechanism linking these to hoarding difficulties is shown consistently. It may be that a stressful event is sufficient but not necessary to trigger hoarding, but work to explore whether the perceived link is an artefact is suggested. |
| What are the help seeking behaviours within this group? | We can be confident stating that direct help-seeking from older adults with hoarding problems is rare, and that most people come to the attention of services through other agencies. More tentatively, it seems that frequently hoarding is not seen as problematic by the person involved. It would be helpful for studies to examine further the prevalence of, triggers for, and barriers against, help-seeking. |
| What implications do the above have for theoretical accounts and models of hoarding? | See Discussion. |

Table 2. Summary of findings relating to each of the review questions.

Discussion

By exploring the hoarding literature pertaining to older adults, this review has highlighted a relatively small but growing body of work in this area. Two general observations are made: firstly, the literature is overly descriptive and is hindered by a lack of good quality empirical studies, and secondly, there is an overemphasis on behavioural aspects of the condition at the expense of cognition.

While a range of study designs is used, including some cross-sectional work, work with analogue nonclinical populations, and some initial interventive designs, the vast majority

of the literature is descriptive in nature. These studies include both case reports and more structured qualitative studies using interview methodologies. While these studies help to develop an understanding of older adults' hoarding experiences, the management of cases and procedures undertaken, and the experiences of the professionals involved, they are limited in their capacity to generate and test explanatory hypotheses regarding problem onset, maintenance, and development over time.

As a result, distinctions between adult and older adult hoarding populations are difficult to analyse, as hoarding-related, and age-related factors cannot be effectively separated. This means the present review can only point to certain elements of the literature that may be more relevant to older adult populations. These include the findings around dementia and memory, though it is unclear whether these problems simply exacerbate existing hoarding tendencies, or should be considered causally linked to hoarding. Other factors that seem to be more marked in this literature and are likely to be age-related are the extent of clutter, which accumulates over time, and the degree of functional impairment, which occurs both due to clutter and other factors such as social isolation, physical health problems and mobility issues. Health and mobility problems seem to be linked to the self-neglect/Diogenes syndrome/squalor literature, which therefore features prominently in this age group.

There seems to be an overemphasis on behavioural aspects of hoarding within this literature, with studies tending to favour descriptions of the extent of clutter, self-neglect, or acquisition behaviours over saving cognitions and beliefs about possessions. In part this is understandable as cases are more likely to come to the attention of services when these behavioural aspects get 'out of control', but a greater focus on the beliefs and cognitive processes involved is required in order to fully understand the psychological aspects of these difficulties. Similarly this behavioural bias plays out in the literature's focus on the management of hoarding problems in the community (such as Hoarding 'Task Forces', multiagency working techniques, removal of clutter), as opposed to a focus on understanding the thoughts and beliefs that underpin the difficulties and distress experienced.

Consequently, there is a clear need for good quality empirical data in this field, employing longitudinal and cross-sectional (with respect to age) designs with appropriate control groups. This will allow the development and testing of specific hypotheses around hoarding and its relationship to age, and be able to explore hoarding psychopathology without confounding age-related factors. Research in this area needs to move beyond

simply describing cases and circumstances, and focus more on developing an understanding of why these problems have come about, underlying beliefs and cognitions, and the mechanisms by which they are maintained and/or exacerbated.

The reviewed studies provide support for some of the theoretical perspectives of hoarding outlined previously. Examples of material deprivation, attachment problems, neuropsychological deficits, obsessive-compulsive difficulties and stressful life events can be found in the older adult literature, while biological and genetic perspectives are not mentioned. It is hard to draw conclusions from this however, in that the generally descriptive nature of the studies means there is insufficient evidence to say some perspectives are supported while others are not.

What is perhaps more clear from these findings is the heterogeneity of hoarding problems – there is no consistent pattern of past experiences among older adults who hoard, suggesting that there may be multiple routes leading to the expression of hoarding behaviours. It is questioned whether existing models of hoarding problems fully take this heterogeneity into account, as it is tempting to design models to account for all circumstances, despite this resulting in a lack of specificity. For example the model described by Frost and Hartl (1996) simply lists multiple causal factors, albeit tentatively, and even within individual case formulations are multiple mechanisms outlined (see Calamari et al., 2012, p. 145).

It is suggested that theoretical work at present is being hindered by an overreliance on older adult populations, where hoarding is clearly manifested in behaviour and highly problematic. By primarily deriving theory from a single group such as this, it is difficult to determine whether factors represent causes or effects of hoarding, or if indeed they are relevant to the core psychopathology of hoarding at all, being ‘side-effects’ linked simply to the chronicity of problems, or the process of ageing. For example, social isolation may lead someone to turn to possessions for comfort (cause), it may result from not being able to have people visit your home (effect), or it may be that friends have passed away or that mobility problems make going out difficult (age-related artefact).

Consequently, two conclusions regarding theoretical work are drawn:

1. Investigation of the mechanisms behind specific aspects of hoarding problems, such as acquisition, churning, and discarding, may be helpful in developing models that can more succinctly account for the development and maintenance of hoarding problems, rather than models that aim to account for all circumstances.

2. Although somewhat paradoxical for a review of older adult literature, it seems that studying younger populations, where 'nascent' hoarding symptoms may not be associated with extensive clutter, could be beneficial in refining theoretical work by removing artefacts and addressing concerns of cause and effect.

References

- Andersen, E., Raffin-Bouchal, S., & Marcy-Edwards, D. (2008). Reasons to Accumulate Excess: Older Adults Who Hoard Possessions. *Home Health Care Services Quarterly*, 27(3), 187-216.
- Ayers, C. R., Bratiotis, C., Saxena, S., & Wetherell, J. L. (2012). Therapist and patient perspectives on cognitive-behavioral therapy for older adults with hoarding disorder: A collective case study. *Aging & Mental Health*, 16(7), 915-921.
- Ayers, C. R., Saxena, S., Golshan, S., & Wetherell, J. L. (2010). Age at onset and clinical features of late life compulsive hoarding. *International journal of geriatric psychiatry*, 25(2), 142-149.
- Ayers, C. R., Schiehser, D., Liu, L., & Wetherell, J. L. (2012). Functional impairment in geriatric hoarding participants. *Journal of Obsessive-Compulsive and Related Disorders*, 1(4), 263-266. doi: <http://dx.doi.org/10.1016/j.jocrd.2012.07.002>
- Ayers, C. R., Wetherell, J. L., Golshan, S., & Saxena, S. (2011). Cognitive-behavioral therapy for geriatric compulsive hoarding. *Behaviour Research and Therapy*.
- Ayers, C. R., Wetherell, J. L., Schiehser, D., Almklov, E., Golshan, S., & Saxena, S. (2013). Executive functioning in older adults with hoarding disorder. *International journal of geriatric psychiatry*. doi: 10.1002/gps.3940
- Baker, J. C., LeBlanc, L. A., Raetz, P. B., & Hilton, L. C. (2011). Assessment and Treatment of Hoarding in an Individual With Dementia. *Behavior Therapy*.
- Beekman, A. T. F., Bremmer, M. A., Deeg, D. J. H., Van Balkom, A., Smit, J. H., De Beurs, E. (1998). Anxiety disorders in later life: a report from the Longitudinal Aging Study Amsterdam. *International journal of geriatric psychiatry*, 13(10), 717-726.
- Calamari, J. E., Pontarelli, N. K., Armstrong, K. M., & Salstrom, S. A. (2012). Obsessive-Compulsive Disorder in Late-Life. *Cognitive and Behavioral Practice*.
- Cermele, J. A., Melendez-Pallitto, L., & Pandina, G. J. (2001). Intervention in Compulsive Hoarding A Case Study. *Behavior Modification*, 25(2), 214-232.
- Chapin, R. K., Sergeant, J. F., Landry, S. T., Koenig, T., Leiste, M., & Reynolds, K. (2010). Hoarding Cases Involving Older Adults: The Transition From a Private Matter to the Public Sector. *Journal of Gerontological Social Work*, 53(8), 723-742.
- Dong, X., Simon, M. A., Mosqueda, L., & Evans, D. A. (2012). The Prevalence of Elder Self-Neglect in a Community-Dwelling Population Hoarding, Hygiene, and Environmental Hazards. *Journal of Aging and Health*, 24(3), 507-524.
- Ellis, J. C., Mullan, J., & Worsley, T. (2011). Prescription medication hoarding and borrowing or sharing behaviours in older residents in the Illawarra, New South Wales, Australia. *Australasian journal on ageing*, 30(3), 119-123.
- Franks, M., Lund, D. A., Poulton, D., & Caserta, M. S. (2004). Understanding Hoarding Behavior Among Older Adults. *Journal of Gerontological Social Work*, 42(3-4), 77-107.
- Frost, R. O., & Gross, R. C. (1993). The hoarding of possessions. *Behaviour Research and Therapy*, 31(4), 367-381.
- Frost, R. O., & Hartl, T. L. (1996). A cognitive-behavioral model of compulsive hoarding. *Behaviour Research and Therapy*, 34(4), 341-350. doi: [http://dx.doi.org/10.1016/0005-7967\(95\)00071-2](http://dx.doi.org/10.1016/0005-7967(95)00071-2)

- Frost, R. O., Hartl, T. L., Christian, R., & Williams, N. (1995). The value of possessions in compulsive hoarding: patterns of use and attachment. *Behaviour Research and Therapy*, 33(8), 897-902.
- Frost, R. O., Krause, M. S., & Steketee, G. (1996). Hoarding and obsessive-compulsive symptoms. *Behavior Modification*, 20(1), 116-132.
- Frost, R. O., Steketee, G., & Williams, L. (2002). Compulsive buying, compulsive hoarding, and obsessive-compulsive disorder. *Behavior Therapy*, 33(2), 201-214.
- Gordon, O. M., Salkovskis, P. M., & Oldfield, V. B. (2013). Beliefs and experiences in hoarding. *Journal of Anxiety Disorders*, 27(3), 328-339. doi: <http://dx.doi.org/10.1016/j.janxdis.2013.02.009>
- Grisham, J. R., Brown, T. A., Savage, C. R., Steketee, G., & Barlow, D. H. (2007). Neuropsychological impairment associated with compulsive hoarding. *Behaviour Research and Therapy*, 45(7), 1471-1483.
- Grisham, J. R., Frost, R. O., Steketee, G., Kim, H. J., & Hood, S. (2006). Age of onset of compulsive hoarding. *Journal of Anxiety Disorders*, 20(5), 675-686.
- Grisham, J. R., Norberg, M. M., Williams, A. D., Certoma, S. P., & Kadib, R. (2010). Categorization and cognitive deficits in compulsive hoarding. *Behaviour Research and Therapy*, 48(9), 866-872.
- Halbreich, U. (2003). Anxiety disorders in women: a developmental and lifecycle perspective. *Depression and anxiety*, 17(3), 107-110.
- Hartl, T. L., Duffany, S. R., Allen, G. J., Steketee, G., & Frost, R. O. (2005). Relationships among compulsive hoarding, trauma, and attention-deficit/hyperactivity disorder. *Behaviour Research and Therapy*, 43(2), 269-276.
- Hogstel, M. O. (1993). Understanding hoarding behaviors in the elderly. *AJN The American Journal of Nursing*, 93(7), 42.
- Hwang, J. P., Tsai, S. J., Yang, C. H., Liu, K. M., & Ling, J. F. (1998). Hoarding behavior in dementia: a preliminary report. *American Journal of Geriatric Psych*, 6(4), 285-289.
- Iervolino, A., Perroud, N., Fullana, M., Guipponi, M., Cherkas, L., Collier, D. (2009). Prevalence and heritability of compulsive hoarding: a twin study. *American Journal of Psychiatry*, 166(10), 1156-1161.
- Jorm, A. F. (2000). Does old age reduce the risk of anxiety and depression? A review of epidemiological studies across the adult life span. *Psychological medicine*, 30(01), 11-22.
- Kellett, S. (2007). Compulsive hoarding: a site-security model and associated psychological treatment strategies. *Clinical Psychology & Psychotherapy*, 14(6), 413-427.
- Kellett, S., Greenhalgh, R., Beail, N., & Ridgway, N. (2010). Compulsive hoarding: An interpretative phenomenological analysis. *Behavioural and Cognitive Psychotherapy*, 38(2).
- Kim, H. J., Steketee, G., & Frost, R. O. (2001). Hoarding by elderly people. *Health & Social Work*, 26(3), 176-184.
- Koenig, T. L., Chapin, R., & Spano, R. (2010). Using multidisciplinary teams to address ethical dilemmas with older adults who hoard. *Journal of Gerontological Social Work*, 53(2), 137-147.
- Koenig, T. L., Leiste, M. R., Spano, R., & Chapin, R. K. (2013). Multidisciplinary Team Perspectives on Older Adult Hoarding and Mental Illness. *Journal of Elder Abuse & Neglect*, 25(1), 56-75.
- Krasucki, C., Howard, R., & Mann, A. (1998). The relationship between anxiety disorders and age. *International journal of geriatric psychiatry*, 13(2), 79-99.
- Landau, D., Iervolino, A. C., Pertusa, A., Santo, S., Singh, S., & Mataix-Cols, D. (2011). Stressful life events and material deprivation in hoarding disorder. *Journal of Anxiety Disorders*, 25(2), 192-202.
- Lee, S. M. (2010). Hoarding in older people: The role of the Aged Care Assessment Service. *Australasian journal on ageing*, 29(3), 134-134.

- Lee, S. M., & LoGiudice, D. (2012). Phenomenology of squalor, hoarding and self-neglect: an Australian aged care perspective. *Internal Medicine Journal*, 42(1), 98-101.
- Lejoyeux, M., & Weinstein, A. (2010). Compulsive Buying. *The American Journal of Drug and Alcohol Abuse*, 36(5), 248-253. doi: doi:10.3109/00952990.2010.493590
- Luchian, S. A., McNally, R. J., & Hooley, J. M. (2007). Cognitive aspects of nonclinical obsessive-compulsive hoarding. *Behaviour Research and Therapy*, 45(7), 1657-1662.
- Mackin, R. S., Areán, P. A., Delucchi, K. L., & Mathews, C. A. (2011). Cognitive functioning in individuals with severe compulsive hoarding behaviors and late life depression. *International journal of geriatric psychiatry*, 26(3), 314-321.
- Maier, T. (2004). On phenomenology and classification of hoarding: a review. *Acta Psychiatrica Scandinavica*, 110(5), 323-337.
- Manela, M., Katona, C., & Livingston, G. (1996). How common are the anxiety disorders in old age? *International journal of geriatric psychiatry*, 11(1), 65-70.
- Marx, M. S., & Cohen-Mansfield, J. (2003). Hoarding behavior in the elderly: a comparison between community-dwelling persons and nursing home residents. *International psychogeriatrics*, 15(03), 289-306.
- Mataix-Cols, D., Frost, R. O., Pertusa, A., Clark, L. A., Saxena, S., Leckman, J. F. (2010). Hoarding disorder: a new diagnosis for DSM-V? *Depression and anxiety*, 27(6), 556-572.
- Mataix-Cols, D., & Pertusa, A. (2012). Annual Research Review: Hoarding disorder: potential benefits and pitfalls of a new mental disorder. *Journal of Child Psychology and Psychiatry*, 53(5), 608-618.
- Mogan, C., Kyrios, M., Schweitzer, I., Yap, K., & Moulding, R. (2012). Phenomenology Of Hoarding What is hoarded by individuals with Hoarding Disorder? *Journal of Obsessive-Compulsive and Related Disorders*.
- Mueller, A., Mitchell, J. E., Crosby, R. D., Glaesmer, H., & De Zwaan, M. (2009). The prevalence of compulsive hoarding and its association with compulsive buying in a German population-based sample. *Behaviour Research and Therapy*, 47(8), 705-709.
- Nedelisky, A., & Steele, M. (2009). Attachment to people and to objects in obsessive-compulsive disorder: an exploratory comparison of hoarders and non-hoarders. *Attachment & human development*, 11(4), 365-383.
- Nordsletten, A. E., & Mataix-Cols, D. (2012). Hoarding versus collecting: Where does pathology diverge from play? *Clinical psychology review*, 32(3), 165-176.
- O'Sullivan, S. S., Djamshidian, A., Evans, A. H., Loane, C. M., Lees, A. J., & Lawrence, A. D. (2010). Excessive hoarding in Parkinson's disease. *Movement Disorders*, 25(8), 1026-1033.
- Oglesby, M. E., Medley, A. N., Norr, A. M., Capron, D. W., Korte, K. J., & Schmidt, N. B. (in press). Intolerance of uncertainty as a vulnerability factor for hoarding behaviors. *Journal of affective disorders*(0). doi: <http://dx.doi.org/10.1016/j.jad.2012.08.003>
- Pertusa, A., Fullana, M., Singh, S., Alonso, P., Menchón, J., & Mataix-Cols, D. (2008). Compulsive hoarding: OCD symptom, distinct clinical syndrome, or both? *American Journal of Psychiatry*, 165(10), 1289-1298.
- Poythress, E. L., Burnett, J., Naik, A. D., Sabrina Pickens, M., & Dyer, C. B. (2007). Severe self-neglect: An epidemiological and historical perspective. *Journal of Elder Abuse & Neglect*, 18(4), 5-12.
- Rachman, S., Elliott, C. M., Shafran, R., & Radomsky, A. S. (2009). Separating hoarding from OCD. *Behaviour Research and Therapy*, 47(6), 520-522.
- Reid, J. M., Arnold, E., Rosen, S., Mason, G., Larson, M. J., Murphy, T. K. (2011). Hoarding Behaviors among Nonclinical Elderly Adults: Correlations with Hoarding Cognitions, Obsessive-Compulsive Symptoms, and Measures of General Psychopathology. *Journal of Anxiety Disorders*.

- Reinisch, A. I. (2009). Characteristics of six recent animal hoarding cases in Manitoba. *The Canadian Veterinary Journal*, 50(10), 1069.
- Samuels, J., Bienvenu, O. J., Grados, M. A., Cullen, B., Riddle, M. A., Liang, K. (2008). Prevalence and correlates of hoarding behavior in a community-based sample. *Behaviour Research and Therapy*, 46(7), 836-844.
- Samuels, J., Bienvenu, O. J., Riddle, M. A., Cullen, B. A. M., Grados, M. A., Liang, K.-Y. (2002). Hoarding in obsessive compulsive disorder: results from a case-control study. *Behaviour Research and Therapy*, 40(5), 517-528.
- Saxena, S. (2007). Is compulsive hoarding a genetically and neurobiologically discrete syndrome? Implications for diagnostic classification. *American Journal of Psychiatry*, 164, 380-384.
- Schroepfer, T., & Ingersoll-Dayton, B. (2001). Caregiver mastery of hoarding behavior in a patient with dementia. *Clinical gerontologist*, 22(3-4), 109-135.
- Seaman, C., Oldfield, V. B., Gordon, O., Forrester, E., & Salkovskis, P. M. (2010). The Impact of Symptomatic Hoarding in OCD and its Treatment. *Behavioural and Cognitive Psychotherapy*, 38(2).
- Sheppard, B., Chavira, D., Azzam, A., Grados, M. A., Umaña, P., Garrido, H. (2010). ADHD prevalence and association with hoarding behaviors in childhood-onset OCD. *Depression and anxiety*, 27(7), 667-674.
- Stein, D. J., Laszlo, B., Marais, E., Seedat, S., & Potocnik, F. (1997). Hoarding symptoms in patients on a geriatric psychiatry inpatient unit.
- Steketee, G., & Frost, R. O. (2003). Compulsive hoarding: Current status of the research. *Clinical psychology review*, 23(7), 905-927. doi: <http://dx.doi.org/10.1016/j.cpr.2003.08.002>
- Steketee, G., Frost, R. O., & Kyrios, M. (2003). Cognitive aspects of compulsive hoarding. *Cognitive Therapy and Research*, 27(4), 463-479.
- Steketee, G., Schmalisch, C. S., Dierberger, A., DeNobel, D., & Frost, R. O. (2012). Symptoms and history of hoarding in older adults. *Journal of Obsessive-Compulsive and Related Disorders*, 1(1), 1-7.
- Thomas, N. D. (1998). Hoarding: Eccentricity or pathology: When to intervene? *Journal of Gerontological Social Work*, 29(1), 45-55.
- Tolin, D. F., Frost, R. O., Steketee, G., Gray, K. D., & Fitch, K. E. (2008). The economic and social burden of compulsive hoarding. *Psychiatry research*, 160(2), 200-211.
- Tolin, D. F., Meunier, S. A., Frost, R. O., & Steketee, G. (2010). Course of compulsive hoarding and its relationship to life events. *Depression and anxiety*, 27(9), 829-838.
- Tolin, D. F., Villavicencio, A., Umbach, A., & Kurtz, M. M. (2011). Neuropsychological functioning in hoarding disorder. *Psychiatry research*, 189(3), 413-418. doi: <http://dx.doi.org/10.1016/j.psychres.2011.06.022>
- Turner, K., Steketee, G., & Nauth, L. (2010). Treating Elders With Compulsive Hoarding: A Pilot Program. *Cognitive and Behavioral Practice*, 17(4), 449-457.
- Whitfield, K. Y., Daniels, J. S., Flesaker, K., & Simmons, D. (2012). Older Adults with Hoarding Behaviour Aging in Place: Looking to a Collaborative Community-Based Planning Approach for Solutions. *Journal of Aging Research*.
- Wu, K. D. (2011). The Structure of Obsessions and Compulsions: Implications for the Classification of Hoarding. *International Journal of Cognitive Therapy*, 4(3), 239-252.

Service Improvement Project

Service user perspectives on the use of outcome measures in psychological therapy

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Abstract

Despite much research into the benefits of outcome measurement, service user opinions on this as part of the therapy process have not been investigated. This study aimed to assess service users' experiences of completing measures during psychological therapy, with a view to exploring how therapists can maximise how helpful measures are in therapy. Fifteen participants completed surveys about the use of measures in their current episode of care. Results showed that despite mixed experiences in how measures were explained and used, service users showed generally favourable attitudes towards their use in therapy, with them being perceived as most helpful when well integrated into sessions by their therapists. Implications for clinical practice, service development, and further research are discussed.

Keywords: outcome measures, service user views, questionnaires, therapy, routine outcome measurement

Learning Objectives:

- To understand service users' experiences and opinions on the use of measures in therapy.
- To consider clinicians' beliefs about measures and how this may affect their use.
- To consider how the perceived helpfulness of measures might be improved.

Introduction

Among health settings, an outcome has been defined as "the change in a patient's current and future health status that can be attributed to antecedent healthcare" (Hunter, Higginson, & Garralda, 1996). The monitoring of outcomes is becoming a routine part of healthcare in various settings, and can draw upon a wide range of data sources, such as hospital admissions, medication use, and mortality rates. Many of these sources are perhaps more suited to physical health interventions, and as a result it may be true that services providing psychological interventions have lagged behind in obtaining outcome data (see also Salkovskis, 1984 for discussion of some psychologists' reservations about evaluating interventions and research, which may also explain this discrepancy).

Outcome data for psychological interventions comes principally in the form of questionnaire-based measures. These are frequently given to service users across a wide range of healthcare settings and are used to assess current symptoms, difficulties, or

general functioning, along with assessing the effectiveness of interventions from the service user's perspective (Dawson, Doll, Fitzpatrick, Jenkinson, & Carr, 2009).

Within psychological therapies, these measures may be used early on in therapy to gather information as part of an assessment process, and they may also be repeated or revisited later in therapy to explore changes and evaluate the impact of the psychological intervention. There is some evidence to suggest that the use of standardised outcome measures in psychological therapies can increase the detection of psychological problems (Greenhalgh & Meadows, 1999) and potentially improve therapy outcomes (Harmon, Hawkins, Lambert, Slade, & Whipple, 2005; Hawkins, Lambert, Vermeersch, Slade, & Tuttle, 2004; Lambert, Whipple, & Hawkins, 2003; Lambert, Whipple, Smart, Vermeersch, & Nielsen, 2001; Lambert et al., 2002).

As a result, the use of outcome measures is recommended by a number of guidelines and empirical papers (Department of Health, 1999, 2008; Nordal, 2012). The National Institute for Health and Clinical Excellence (NICE) guidelines for depression recommend that clinicians "use routine outcome measures and ensure that the person with depression is involved in reviewing the efficacy of the treatment" (NICE, 2009, p. 8) and the British Association for Behavioural and Cognitive Psychotherapies (BABCP) Standards of Conduct, Performance and Ethics emphasise the "service user's role in the continual evaluation of the treatment" (BABCP, 2010, p. 11). These documents therefore suggest a role for measures in recognising when it may be appropriate to change, adapt, or discontinue therapy.

The Increasing Access to Psychological Therapies (IAPT) initiative uses routine outcome measurement built into basic service provision, and while this is less common in secondary care settings, with greater clinician choice about the use of measures, discussions of this topic seem to be increasingly common, perhaps being linked to a continued push for services to demonstrate their effectiveness to commissioners and other stakeholders.

Typically, studies of outcome measurement and the use of measures are considered in terms of their value either for clinicians or for services as a whole. Clinician-focused studies emphasise the benefits of measures in providing information to therapists and tracking clients' progress in therapy (Hatfield & Ogles, 2004; Lambert et al., 2001; Lambert et al., 2002). Service-focused studies highlight the importance of measures in

assessing overall effectiveness of services, meeting audit standards, ensuring quality, and supporting business cases for service development (Hunter et al., 1996; McInnes, 2006).

Surprisingly, the impact of completing measures on clients themselves is significantly underresearched, and very few studies have attempted to seek service user perspectives on this. Where this does occur, studies tend to use focus group methodologies to gather opinions on different measures themselves (Mental Health Research Network, 2010), or ideas about what outcomes are appropriate to be measuring (Beale, Cella, & de C. Williams, 2011; Perry & Gilbody, 2009). Another study compared therapists' and clients' experiences of trialling the CORE-Net outcome measurement system routinely in every therapy session (Unsworth, Cowie, & Green, 2012) finding that clients were generally happier than therapists about using the measures, and that measures helped the therapeutic relationship.

The above studies serve an important role in highlighting service user perspectives on the role of measures in their overall therapy 'experience'. However, there is little information as yet on service user views and opinions on how, not just which, measures are used by therapists, along with the use of measures in general clinical practice rather than in specific focus groups or trials. Given the prominence of outcome measurement work in recent years it is concerning that such little attention has been paid to the experiences of those who actually complete them.

Given the overrepresentation of studies focusing on how services can benefit from outcome measurement, it is understandable that clinicians may feel that completing measures is something done just for management purposes, and that clients themselves simply have to endure this as an 'add-on' to therapy rather than an integrated part of it. Perhaps due to this perceived conflict of interest between services and clients, clinicians themselves tend to hold quite strong opinions, and voice anxieties and concerns about outcome measures and their use in therapy (Hatfield & Ogles, 2004, 2007; Unsworth et al., 2012). It is perhaps not surprising therefore that implementing standardised outcome measurement procedures within services is associated with many complexities and challenges (McInnes, 2006; Rao, Hendry, & Watson, 2010) and that even in services using 'routine outcome measurement', clinicians may not be using measures routinely (James, Elgie, Adams, Henderson, & Salkovskis, manuscript in preparation).

Other criticisms from clinicians about using measures include practical issues, such as the time needed to complete measures within the valuable 'therapy hour', or the suggestion

that completing measures may interfere with the therapeutic relationship (see McInnes, 2006), as well as methodological issues, such as the validity of the measures used (Greenhalgh & Meadows, 1999).

Importantly these criticisms may or may not be valid, but that at present there is barely any evidence from which to draw conclusions. It seems that both the favourable and unfavourable views of measures held by clinicians are based on assumptions or anecdotal accounts about how service users experience this process and whether they find it a helpful or unhelpful part of therapy. This, coupled with evidence that clinicians' perspectives on what they think is helpful for their clients may not match those of the clients themselves (Beale et al., 2011), demonstrates a clear need for this to be investigated.

This study aimed to address this gap by investigating the opinions and attitudes of the users of a secondary care psychological therapies service towards the use of measures in therapy. It aimed to explore whether and how measures were used, and what suggestions people would make to improve their helpfulness. In a context of being encouraged to increase their use of measures, particularly in secondary care, therapists may appreciate a deeper understanding of service users' experiences and opinions.

Method

Design

The study had two main components. Firstly, service user perspectives on outcome measurement were explored using a survey employing predominantly quantitative approaches, with some qualitative data also collected through the use of free response questions. Secondly, clinicians' views were obtained using a different brief survey.

This study was ethically approved by both the NHS Research Ethics Committee (Study Reference 12/SC/0517) and the local NHS Research and Development office.

Service Context

The study was conducted within an NHS secondary care psychological therapies service, serving a countywide population of approximately 290,000 adults of working age, living in mixed rural and urban settings. Routine outcome monitoring using measures was not taking place within the service at the time of the study, though more standardised use of measures was being discussed at a management level, and clinicians were using measures if they felt it clinically appropriate.

Service User Perspective

Materials.

A survey was developed to explore participants' general impressions and thoughts about how measures are used in therapy. Two versions of the survey (A and B) were produced, for those participants who had and had not completed measures during their therapy sessions, respectively. The surveys can be found in Appendix IV.

The following areas were addressed:

- How and when measures were used with the service user (Version A)
- Whether service users who were not given measures were expecting to receive these (Version B)
- How completing measures made service users feel. These were rated on 0-10 Likert scales (Version A)
- How service users feel measures impact on therapy. These were drawn from the authors' clinical experience, suggestions from discussions with consultees during project development, and some additional hypotheses. They were rated on -3 to +3 Likert scales (Version A and B)
- Service user perceptions of the therapeutic relationship, and the helpfulness of measures for them and others. These were rated on -5 to +5 Likert scales (Version A and B)
- Free response items, such as asking whether service users had suggestions of how to improve how measures can be used (Version A and B)
- Brief demographic questions (Version A and B)

Potential participants were each given an envelope containing the following:

- Study information sheet
- Consent form
- Survey A
- Survey B
- Freepost envelope

Participants.

From a total of 42 distributed survey packs, fifteen people participated in the study (13 female, mean age 38.9), giving a postal response rate of 36%. All participants were 18 or over, were currently accessing the psychological therapies service and had attended at

least 3 sessions in their current episode of care with at least one of the following health professionals:

- Art psychotherapist
- Clinical psychologist
- Nurse practitioner/Clinical Nurse Specialist
- Occupational therapist

Procedure.

Twenty clinicians within the service were approached regarding the study, and were asked to identify eligible participants from their current caseloads and distribute a survey pack to each person at their next appointment. Nine clinicians distributed at least one pack, with a total of 42 packs distributed. Service users were free to read the study information in their own time and decide whether they wished to participate. Participation involved completion of the appropriate survey and the consent form, and its return in the freepost envelope provided.

Clinician Perspective

Materials.

A brief survey was developed to ask clinicians about their use of measures (see Appendix III). It addressed the following:

- The percentage of service users with whom they use measures
 - The names of outcome measures they most commonly use
 - A set of positive and negative beliefs about measures, drawn from discussions with consultees during project development and the authors' clinical experience.
- Clinicians were asked to rate how well each statement applies to them.

Participants.

Ten clinicians working in the service responded to the survey, out of 20 eligible members of staff, whose professions are described above.

Procedure.

All eligible clinicians in the service were told about the study and sent a copy of the survey to complete, which could be returned in hard copy or by email.

Results

Clinician Data

Of the ten clinicians who responded to the survey, six were clinical psychologists (60%), and four were psychological therapists with nursing backgrounds (40%).

Clinicians reported using measures with an average of 71.7% of service users, with individual scores ranging from 17% to 100%. Psychological Therapists used measures with a significantly higher proportion of service users (93%) compared to Clinical Psychologists (57.5%): $t(6.15) = 2.7, p = .035$.

A total of 33 different measures were listed by clinicians as tools they tend to use with their clients. The frequency of the different measures reported can be seen in Table 1.

| Outcome Measure | No. Of Clinicians |
|---|--------------------------|
| BDI-II (Beck Depression Inventory) | 7 |
| Impact of Events Scale | 6 |
| CORE Outcome Measure | 5 |
| HADS (Hospital Anxiety and Depression Scale) | 4 |
| BAI (Beck Anxiety Inventory) | 3 |
| DES-II (Dissociative Experiences Scale) | 3 |
| Effects of Problem on Life | 3 |
| BAVQ-R (Beliefs About Voices Questionnaire) | 2 |
| Five Facets of Mindfulness Scale | 2 |
| MCMI-III (Millon Clinical Multiaxial Inventory) | 2 |
| PHQ-9 (Patient Health Questionnaire) | 2 |
| YSQ (Young Schema Questionnaire) | 2 |
| AAQ-II (Acceptance and Action Questionnaire) | 1 |
| AQ and EQ (Autistic and Empathy Quotient Tests) | 1 |
| BHS (Beck Hopelessness Scale) | 1 |
| CAPS (Clinician Administered PTSD Scale) | 1 |
| CAT (Cognitive Analytic Therapy) Rating Sheets | 1 |
| Coping with Difficult Emotions Self-Assessment | 1 |
| Eating Disorders Scale(s) | 1 |
| PDS (Posttraumatic Diagnostic Scale) | 1 |
| Forms of Self-Criticising/Attacking and Self-Reassuring Scale | 1 |
| GAD-7 (Generalised Anxiety Disorder Scale) | 1 |
| Initial PTS questionnaire | 1 |
| OCI (Obsessive Compulsive Inventory) | 1 |
| PCL (Posttraumatic Stress Disorder Checklist) | 1 |
| PSYRATS (Psychotic Symptoms Rating Scales) | 1 |
| Rosenberg Self-Esteem Scale | 1 |
| Self-Compassion Scale | 1 |
| Social Comparison Scale | 1 |
| WEMWBS (Warwick-Edinburgh Mental Well-being Scale) | 1 |
| Wessex Dissociation Scale | 1 |
| Work & Social Adjustment Scale | 1 |
| YBOCS (Yale-Brown Obsessive Compulsive Scale) | 1 |

Table 1. Measures that responding clinicians (n=10) reported they tend to use with clients, arranged by frequency.

The ratings of the extent to which clinicians' felt the statements about measures applied to them are shown in Figure 1. On face validity, the statements were grouped a priori into two subscales representing positive and negative views about measures, both of which showed good internal consistency (Cronbach's $\alpha = .79$ and $.74$ respectively), and four additional statements represented practical and contextual factors around the use of measures. The highest mean rating was for the statement "Measures help with assessment and diagnosis", and there was a general tendency for clinicians to rate positive beliefs about measures as more applicable to them compared to negative ones.

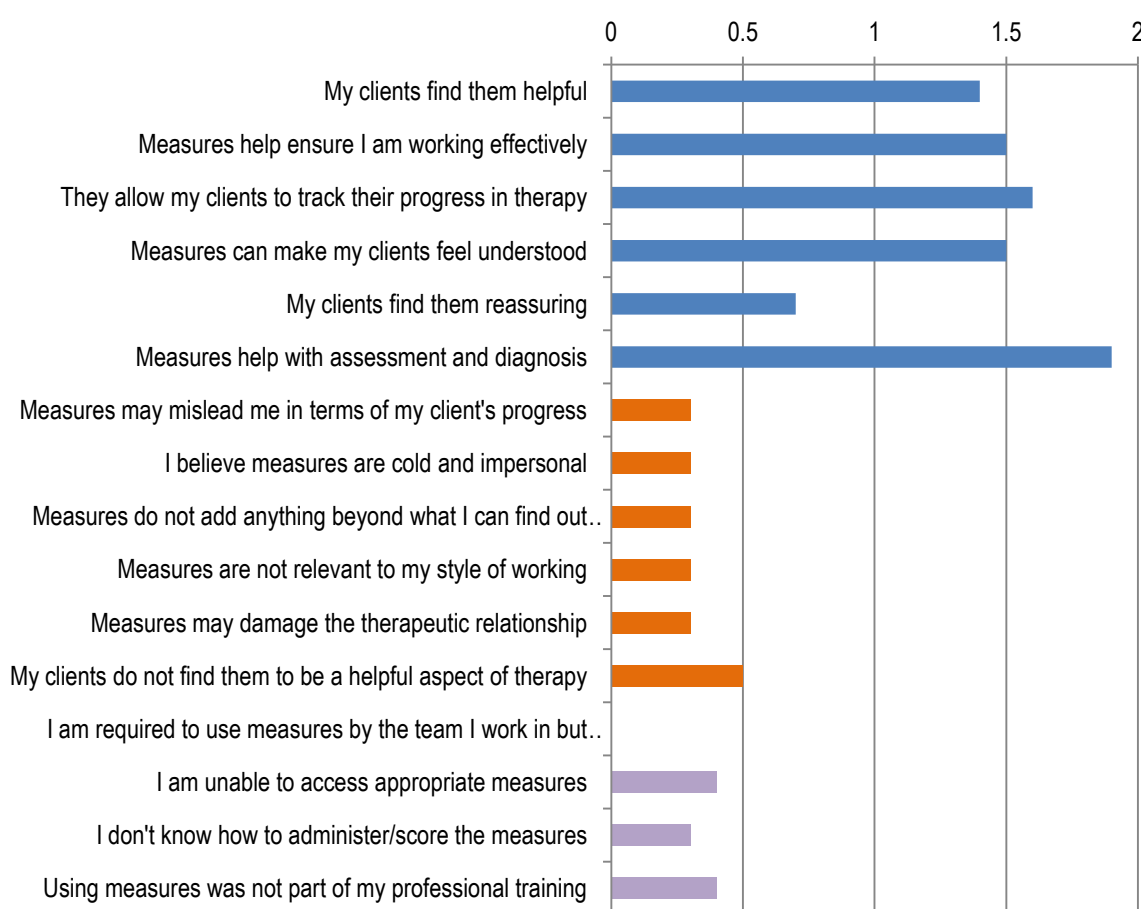


Figure 1. Mean clinician ratings of the extent to which each statement applies to them, rated as 0 (Does not apply to me), 1 (Somewhat applies to me), 2 (Strongly applies to me), or 3 (Completely applies to me) (See Appendix III). The statements are presented in three groups: Positive beliefs about measures, Negative beliefs about measures, and Practical considerations.

Service User Data

Of the fifteen survey respondents, fourteen (93%) completed version A of the survey indicating they had completed measures as part of therapy. The number of sessions respondents had attended varied widely, ranging from six sessions, to many over a three year period. Sessions occurred most commonly on an individual basis (46%), with the remainder in group format, or a mixture of both.

Practical experience of measures.

Regarding how frequently measures were used, five respondents (36%) reported having completed questionnaires once during therapy, with six (43%) completing them every few sessions, and three respondents (21%) every session. Questionnaires were most commonly completed at home (57%), with 43% being completed in session (see Table 2). Completing these in the waiting room was not reported. The same questionnaires had been completed at more than one timepoint by 64% of respondents.

| | | Location of questionnaire completion | | TOTAL |
|---------------------------------------|--------------------|--------------------------------------|---------|-------|
| | | In the session | At home | |
| Frequency of questionnaire completion | Once | 1 | 4 | 5 |
| | Every few sessions | 2 | 4 | 6 |
| | Every session | 3 | 0 | 13 |
| | TOTAL | 6 | 8 | 14 |

Table 2. The locations and frequencies of questionnaire completion reported by respondents.

Six participants (43%) reported that the questionnaires took less than 5 minutes to complete, with four (29%) taking 5-10 minutes, and three (21%) between 11-20 minutes. One respondent (7%) did not answer this question.

Ten respondents (71%) felt that the reasons for using questionnaires had been explained well by their clinician, while two (14%) reported this was done reasonably well, and two (14%) poorly. Similar results were found for how well respondents felt therapists explained how to complete the questionnaires; 64%, 21%, and 14% respectively. No-one reported that these were not explained.

Half the respondents felt that their responses to the questionnaires had been discussed well, with 21% reasonably well, and 7% poorly. Two people (21%) reported that their

responses had not been discussed with them. Regarding how well any changes in their responses over time had been discussed, four respondents (29%) felt this was done well, three (21%) reasonably, one (7%) poorly, and the remaining six (43%) reporting this was not done or not applicable to them.

Impact of measures on therapy.

Respondents ratings indicated that the questionnaires used in therapy were generally relevant to them, and led to helpful discussions with their therapist (see Table 3.).

| -3 | +3 | Mean (SD) |
|--|--|---------------------|
| The questionnaires led to unhelpful discussions with my therapist | The questionnaires led to helpful discussions with my therapist | 1.36 (1.34) |
| Completing questionnaires made me think more negatively about my problems | Completing questionnaires made me think more positively about my problems | -0.57 (1.79) |
| The questionnaires made my difficulties seem less normal | The questionnaires made my difficulties seem more normal | -0.07 (1.33) |
| The questionnaires I was given seemed irrelevant to me | The questionnaires I was given seemed relevant to me | 1.64 (1.69) |
| The questionnaires made me feel less confident in my therapist | The questionnaires made me feel more confident in my therapist | 0.79 (1.76) |
| Completing questionnaires did not help me track my progress in therapy | Completing questionnaires helped me track my progress in therapy | 0.21 (1.97) |
| Completing questionnaires made it harder to tell my therapist difficult things | Completing questionnaires made it easier to tell my therapist difficult things | 0.71 (1.82) |
| The questionnaires did not highlight anything new for me | The questionnaires highlighted new things I had not previously thought about | -0.07 (2.37) |

Table 3. The mean scores given on each -3 to +3 Likert scale, together with the labels given at each end of the scale.

Respondents felt that their therapists understood them and their difficulties well, and that using questionnaires as part of therapy is generally a good idea. Respondents gave more mixed views as to whether they had personally found questionnaires helpful in their therapy, though the mean rating was positive (see Table 4.).

| Question | -5 | +5 | Mean (SD) |
|---|---------------------|---------------------|-----------------------|
| Overall, how well do you feel your therapist understands you and your difficulties? | Extremely poorly | Extremely well | 3.50 (1.56) |
| Overall, how helpful have you found questionnaires to be as part of your therapy? | Extremely unhelpful | Extremely helpful | 0.57 (2.50) |
| Thinking in general, what is your feeling towards questionnaires being routinely used as part of therapy? | Extremely bad idea | Extremely good idea | 1.21 (2.91) |

Table 4. The mean scores given on the questions listed, rated on -5 to +5 Likert scales with the above labels.

Responses to the above three items were positively and significantly inter-correlated, with p values below the corrected critical value of 0.017 (Bonferroni), as shown in Table 5.

| | Helpfulness | Feeling about routine use |
|--------------------------------|--------------------------|---------------------------|
| Therapist Understanding | $r = .652$ $p = .012$ | $r = .738$ $p = .003$ |
| Helpfulness | | $r = .868$ $p < .001$ |

Table 5. Correlation matrix of respondent ratings for the items listed in Table 4.

To obtain a summary indicator of how well service users felt measures had been explained and integrated into therapy, the sum of responses to the following four items was calculated:

- How well were the reasons for using questionnaires explained to you?
- How well was it explained what you needed to do to fill them in?
- How well were your responses discussed with you?
- How well were changes in your responses over time discussed with you?

The relationship between this indicator and respondents' overall ratings of the helpfulness of measures was analysed, with a significant positive correlation being shown ($r = .77$, $p = .001$). These data are shown in Figure 2.

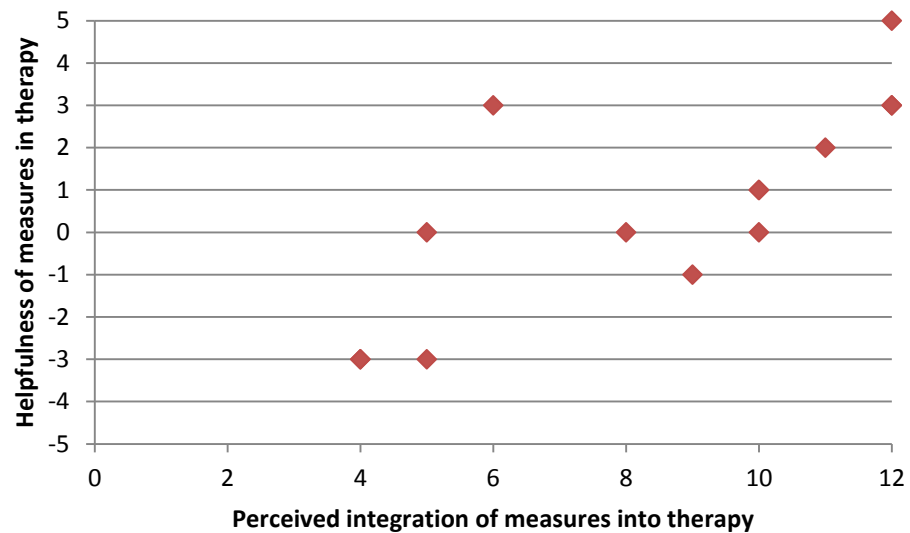


Figure 2. Scatterplot showing the association between respondents' perceptions of how well measures were integrated into the therapy, and how helpful they rated their use overall within their therapy.

Emotional experience of completing measures.

The mean ratings of how completing the questionnaires made respondents feel are shown in Figure 3. 'Anxious' was the most highly rated item (M=5.9), followed by 'Down/depressed' (M=5.6) and 'Interested' (M=5.1).

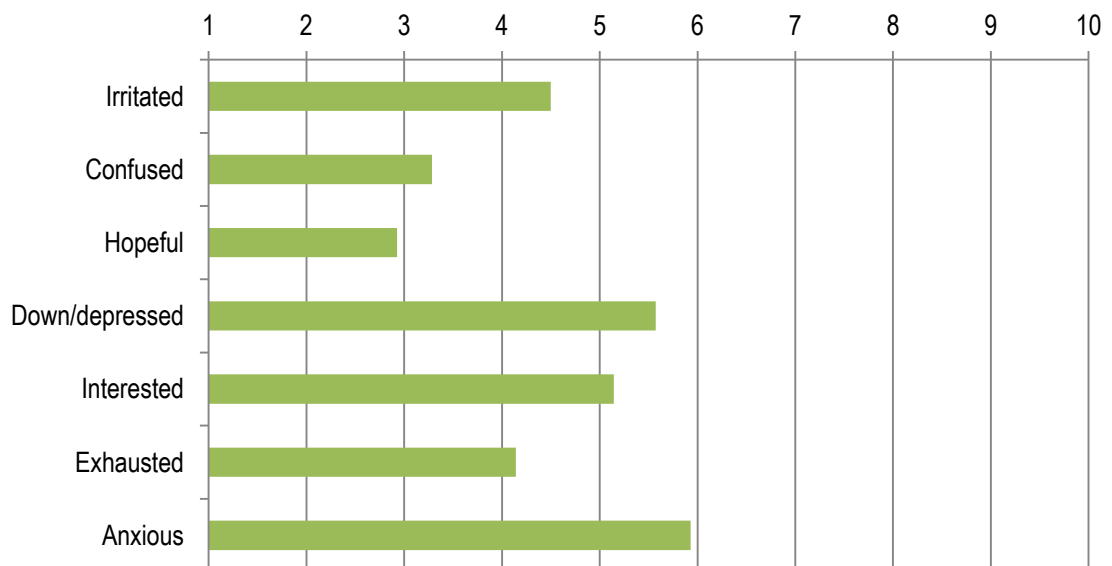


Figure 3. Respondents' mean ratings of how completing questionnaires made them feel, where 1= Not at all, and 10= Extremely.

Comments and suggestions.

Six respondents (43%) provided comments on the use of questionnaires in therapy and/or suggestions on how this process could be improved. These were reviewed and the themes identified are presented below with representative extracts.

The main theme (four participants) present in the responses related to the need for service users' responses to be discussed with them by their therapist, suggesting this does not occur routinely:

"It might be helpful to go through my responses over time, I have completed numerous mood questionnaires but they have never been discussed or mentioned" (Participant 1)

It may be that service users have not had the opportunity to discuss their feelings about what the measures show:

"When a comparison between initial and later questionnaires was calculated, I felt that the results were not accurate, i.e. an "improvement" was indicated which did not correspond with my feelings" (Participant 6)

Another theme (two participants) related to the way response options are presented within measures, with service users expressing these sometimes feel too broad:

"I often find it difficult to limit my considered reply to the 'one answer' choice and with my therapist often found I felt I had to make notes to make my reply more accurate so as not to be misunderstood. A more accurate view of the patient's feelings could be achieved if it was possible to give options to briefly clarify or explain replies." (Participant 15)

"In the forms that I have been asked to complete, I felt the scales had insufficient grades to allow a subtle enough response." (Participant 6)

Other pertinent comments and suggestions made by individual respondents are presented below:

"I do not struggle to talk about mental health problems greatly, whereas a questionnaire could be the voice of someone who does." (Participant 12)

"I don't know whether the results are recorded on the computer records but I feel that if they were, then periodic completion of the questionnaires may show any significant change, and anyone involved in the care could gain access to these records then they could prove to be useful to both patient and therapist."

(Participant 10)

"Personally I have lied on them as there feels like a pressure to improve and you don't want the services to be dropped or lose funding" (Participant 12)

As there was only one respondent who completed version B of the survey, indicating they had not completed measures as part of therapy, these data were not included in the above analyses. This respondent had not expected to be given questionnaires during therapy, and was unsure about their value, expressing some concerns about their use.

Discussion

This study has shown that service users' perceptions of how well measures were used and integrated into therapy were strongly associated with how helpful they rated measures overall as part of therapy. Service users indicated that the act of completing measures can be difficult at times, raising feelings such as anxiety or low mood, but that they can also provoke interest. They highlighted that the measures they completed seemed relevant to them, and that generally measures led to helpful discussions with their therapists. These findings were supported by service users' comments and suggestions relating to the need for therapists to discuss the responses given and to provide an opportunity to seek service users' perceptions of what the measures may indicate.

The clinicians surveyed reported using a wide range of measures, and generally endorsed positive beliefs about measures more strongly than negative ones. Perhaps as a result they reported using measures with the majority of service users they work with. Most service users in the study reported completing measures as part of their therapy, but had varied experiences regarding how these were used, and how well they were explained by their therapists.

The present results indicate that on average, clinicians reported using measures with 71.7% of service users. There is little data available in the literature to assess how this figure compares with other similar services, but obviously this may appear quite low when seen in the context of services with more routine measurement practices. The clinician

data may be limited to an extent by the size of the sample, and the fact that some professions such as occupational therapy and art psychotherapy were not represented. However, the responses received did represent approximately half the eligible group of clinicians in the service, which is favourable in comparison to other NHS staff surveys. The statements used on this survey show good internal consistency within positive and negative subscales. The fact that clinicians more strongly endorsed the positive items indicates a fairly positive attitude towards the use of measures, and this in itself may have meant clinicians were more likely to complete the survey.

The responses from service users suggest a degree of variation in how well measures were explained, used and integrated into therapy sessions by their therapists. It is interesting to note that despite any difficulties with this, and the fact that on average, completing the measures led to an increase in feelings of anxiety and low mood, service users generally reported that measures led to helpful discussions with their therapists and that they would recommend their use as a routine part of therapy.

These findings must be interpreted tentatively given the limited size of the sample, and possible selection bias on the part of both clinicians and service users, perhaps being more likely to hand out, or complete, surveys if measures had been used successfully. However both clinicians and service users were encouraged to participate in the study even if measures had not been used, minimising this bias where possible. Again a lack of literature in this field perhaps limits the ability to interpret these results in context, but it is hoped that this study will begin the process of developing our knowledge in this area.

The present results point to a number of implications and recommendations for therapists, services, and future research. Perhaps the most clear of these is that therapists need to consider carefully the explanations they provide to service users about the purpose and process of using measures and how they should be completed, which may include encouraging note-writing to clarify responses. Having this 'foundation' in place seems fundamental, along with the subsequent tasks of discussing service users' responses, seeking their experience of completing them, and their perceptions and opinions of the results. Finally where questionnaires are repeated over time, previous responses should be revisited and subjective and objective changes discussed. It appears that this careful and thoughtful approach to using measures in therapy sessions drives their perceived helpfulness overall.

In light of this, it is perhaps appropriate to recommend that services consider the training available to staff, particularly where more routine approaches to collecting outcome data are being implemented or planned. It could be hypothesised that if clinicians hold generally negative beliefs about measures this may lead to more tokenistic use, which the present findings indicate is perceived as unhelpful by service users. Additionally, the findings suggest that services need to ensure the availability of appropriate measures, and as highlighted by one of the suggestions made, to consider whether and how responses might be documented and/or recorded centrally, and if so how this is communicated to service users.

Clearly there are vast opportunities and requirements for further research in this area. As mentioned above, exploring staff training interventions and how clinicians' beliefs about measures may influence how they use them in therapy is an important step given the present results. Understanding clinicians' decision making around whether or not to use measures with a particular person may be beneficial, along with exploring the views of service users who are not given measures, which was not possible in the present study due to lack of these responses. Direct comparisons between therapeutic sessions including and excluding measures may be a helpful methodology to address questions such as how measures might affect the therapeutic relationship, along with qualitative and case study approaches to develop our understanding of service user experiences at an individual level.

The present study aimed to address the concerning gap in the literature regarding service user experiences of completing measures, and to begin the process of examining the assumptions around this made by clinicians. Despite varied experiences in their use, service users showed generally favourable attitudes towards measures being used in therapy, with them being perceived as most helpful when explained and integrated into sessions well by therapists. It is suggested that service managers and clinicians should place greater emphasis on how, and not simply whether, measures are being used. It is hoped that this, combined with exploration of the research ideas outlined above, will improve both our understanding and the service user experience of this common clinical practice.

Summary

- There is an alarming lack of literature investigating service user perspectives on the use of outcome measures in therapy.
- Service users in the current study reported varied experiences regarding how well measures were explained and used.
- Measures were rated as more helpful when they were effectively integrated into therapy by their clinician.
- Service users emphasised the need for clinicians to discuss their responses, highlighting that this does not occur routinely.
- For further reading, see Hatfield and Ogles (2004), Unsworth, Cowie, and Green (2012), (James et al., manuscript in preparation).

Declaration of Interests

None

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References

- BABCP. (2010). Standards of Conduct, Performance and Ethics. Retrieved 29/8/13 from <http://www.babcp.com/files/About/BABCP-Standards-of-Conduct-Performance-and-Ethics.pdf>.
- Beale, M., Cella, M., & de C. Williams, A. C. (2011). Comparing patients' and clinician-researchers' outcome choice for psychological treatment of chronic pain. *Pain*, 152(10), 2283-2286. doi: <http://dx.doi.org/10.1016/j.pain.2011.06.007>
- Dawson, J., Doll, H., Fitzpatrick, R., Jenkinson, C., & Carr, A. J. (2009). The routine use of patient reported outcome measures in healthcare settings. *BMJ (Clinical research ed.)*, 340, c186-c186.
- Department of Health. (1999). National Service Framework for Mental Health: Modern Standards and Service Models. Retrieved 6/9/13 from <https://www.gov.uk/government/publications/quality-standards-for-mental-health-services>.
- Department of Health. (2008). IAPT Implementation Plan: National Guidelines for Regional Delivery. Retrieved 6/9/13 from <http://www.iapt.nhs.uk/silo/files/implementation-plan-national-guidelines-for-regional-delivery.pdf>.
- Greenhalgh, J., & Meadows, K. (1999). The effectiveness of the use of patient-based measures of health in routine practice in improving the process and outcomes of patient care: a literature review. *Journal of evaluation in clinical practice*, 5(4), 401-416.
- Harmon, C., Hawkins, E. J., Lambert, M. J., Slade, K., & Whipple, J. S. (2005). Improving outcomes for poorly responding clients: The use of clinical support tools and feedback to clients. *Journal of clinical psychology*, 61(2), 175-185.

- Hatfield, D. R., & Ogles, B. M. (2004). The Use of Outcome Measures by Psychologists in Clinical Practice. *Professional Psychology: Research and Practice; Professional Psychology: Research and Practice*, 35(5), 485.
- Hatfield, D. R., & Ogles, B. M. (2007). Why some clinicians use outcome measures and others do not. *Administration and policy in mental health and mental health services research*, 34(3), 283-291.
- Hawkins, E. J., Lambert, M. J., Vermeersch, D. A., Slade, K. L., & Tuttle, K. C. (2004). The therapeutic effects of providing patient progress information to therapists and patients. *Psychotherapy Research*, 14(3), 308-327.
- Hunter, J., Higginson, I., & Garralda, E. (1996). Systematic literature review: outcome measures for child and adolescent mental health services. *Journal of Public Health*, 18(2), 197-206.
- James, Elgie, Adams, Henderson, & Salkovskis. (manuscript in preparation). Session-by-session outcome monitoring in CAMHS: Clinicians beliefs.
- Lambert, M. J., Whipple, J. L., & Hawkins, E. J. (2003). Is It Time for Clinicians to Routinely Track Patient Outcome? A Meta-Analysis. *Clinical Psychology: Science and Practice*, 10(3), 288-301.
- Lambert, M. J., Whipple, J. L., Smart, D. W., Vermeersch, D. A., & Nielsen, S. L. (2001). The Effects of Providing Therapists With Feedback on Patient Progress During Psychotherapy: Are Outcomes Enhanced? *Psychotherapy Research*, 11(1), 49-68.
- Lambert, M. J., Whipple, J. L., Vermeersch, D. A., Smart, D. W., Hawkins, E. J., Nielsen, S. L. (2002). Enhancing psychotherapy outcomes via providing feedback on client progress: A replication. *Clinical Psychology & Psychotherapy*, 9(2), 91-103.
- McInnes, B. (2006). Management at a crossroads: The service management challenge of implementing routine evaluation and performance management in psychological therapy and counselling services. *European Journal of Psychotherapy and Counselling*, 8(2), 163-176.
- Mental Health Research Network. (2010). Outcome measurement in mental health: the views of service users. Obtained 25/09/12 from http://www.mhrn.info/data/files/MHRN_PUBLICATIONS/REPORTS/outcome_measures_report.pdf.
- NICE. (2009). Depression in adults: The treatment and management of depression in adults. *Clinical Guideline 90*.
- Nordal, K. C. (2012). Outcomes measurement benefits psychology. *Monitor on Psychology*, 43, 51.
- Perry, A., & Gilbody, S. (2009). User-defined outcomes in mental health: A qualitative study and consensus development exercise. *Journal of Mental Health*, 18(5), 415-423.
- Rao, A. S., Hendry, G., & Watson, R. (2010). The implementation of routine outcome measures in a Tier 3 Psychological Therapies Service: The process of enhancing data quality and reflections of implementation challenges. *Counselling and Psychotherapy Research: Linking research with practice*, 10(1), 32-38.
- Salkovskis, P. M. (1984). Psychological research by NHS clinical psychologists: An analysis and some suggestions. *Bulletin of the British Psychological Society*, 37, 375-377.
- Unsworth, G., Cowie, H., & Green, A. (2012). Therapists' and clients' perceptions of routine outcome measurement in the NHS: A qualitative study. *Counselling and Psychotherapy Research*, 12(1), 71-80.

N.B.

**Responses to the Service Improvement Project findings and recommendations,
from service representatives, can be found in Appendix II.**

Main Research Project

Self-critical thinking and overgeneralisation in depression and eating disorders: An experimental study

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Intended Journal: Behaviour Research and Therapy

This journal has been chosen due to its publication of research in areas related to this paper, and the current study's 'experimental approach to psychopathological processes' highlighted in the aims and scope of the journal.

Abstract

This study investigated the hypothesis that self-critical thinking plays an important role in 'overgeneralisation' where specific negative experiences result in more global negative self-views (sometimes known as 'core beliefs' or 'schemas'). Two experimental tasks, one involving word puzzles of varying difficulty, and one focused on body image, were used to elicit self-critical thoughts in participants with depression (n=26), eating disorders (Anorexia, Bulimia and ED-NOS; n=26) and nonclinical participants (n=26). As predicted, following failure experiences on the word puzzle task, the clinical groups showed greater global negative self-views, controlling for baseline scores, compared to controls. Both habitual and increases in state self-critical thinking was associated with overgeneralisation while negative perfectionism was not. As predicted from Barnard and Teasdale's (1991) Interacting Cognitive Subsystems model, increased global negative self-views were more strongly associated with post-task lowering of mood than self-criticism. Unexpectedly, participants with eating disorders did not report significantly more appearance-related self-criticism or greater global negative self-views after the body image task than the other groups. Overall, the findings are consistent with the suggestion that self-criticism may play an important role in the activation of global negative self-views after a specific negative experience, and this overgeneralisation may in turn result in low mood.

Keywords: Self-criticism, depression, eating disorder, overgeneral, failure, perfectionism

Introduction

Self-critical thinking has been reported across a number of psychological conditions, including depression (Luyten et al., 2007), eating disorders (Fennig et al., 2008; Lehman & Rodin, 1989), social anxiety (Cox et al., 2000), and PTSD (Cox, MacPherson, Enns, & McWilliams, 2004). The impact that self-criticism can have on clinical interventions is significant; it has been shown that people with high levels of self-criticism give lower ratings of the working alliance with their therapist (Whelton, Paulson, & Marusiak, 2007), show generally poorer treatment outcomes (Cox, Walker, Enns, & Karpinski, 2002; Dent & Teasdale, 1988; Marshall, Zuroff, McBride, & Bagby, 2008; Rector, Bagby, Segal, Joffe, & Levitt, 2000) and greater risk of relapse (Mongrain & Leather, 2006). Furthermore, self-criticism has been shown to predict depression and psychosocial impairment in a four year longitudinal study (Dunkley, Sanislow, Grilo, & McGlashan, 2009), and has been identified as a risk factor for suicide, particularly in the presence of a 'brooding ruminative style' (O'Connor & Noyce, 2008).

Given its clinical impact it is perhaps surprising that there are relatively few empirical studies considering self-criticism in its own right. Most existing literature has subsumed

self-criticism under the umbrella of perfectionism using categories of 'self-oriented perfectionism' (Hewitt & Flett, 1991) or 'self-critical perfectionism' (Dunkley & Blankstein, 2000). However, more recent research has begun to examine the role of self-criticism in various clinical problems outside of the construct of perfectionism. For example Pinto-Gouveia and colleagues (2013) demonstrated that where someone experiences a shameful event in early life that becomes central to their identity, this is associated with depression symptoms, but only given the presence of self-criticism. A similar mediating role for self-criticism has been shown in the relationship between childhood emotional abuse and both depression symptoms and body dissatisfaction in binge-eating disorder (Dunkley, Masheb, & Grilo, 2010).

The perfectionism literature tends to consider self-criticism as a stable personality variable or cognitive style (e.g. Hewitt & Flett, 1991), but this does not readily allow for fluctuations in self-critical thinking, or the ability of 'non-self-critical people' to think in this way. Studies using failure feedback designs have shown that on average, most participants show a tendency to criticise their own performance following perceived task failure, regardless of the presence of a 'trait' based bias toward self-criticism (see Besser, Flett, & Hewitt, 2004; Stoeber, Hutchfield, & Wood, 2008; Wenzlaff & Grozier, 1988). This indicates that 'state' self-criticism is possible and may be common for all people in certain contexts, though it may be more marked among people with longstanding experience of self-criticism or clinical conditions.

Lastly and perhaps most crucially, there is a growing body of evidence suggesting that within perfectionism, it is the self-critical aspects that are most closely predictive of clinical symptomatology, such as stress, avoidant coping, low perceived social support and negative affect (Dunkley, Zuroff, & Blankstein, 2006), and 'maladaptive' behaviours, such as compulsive exercising (Taranis & Meyer, 2010). Dunkley, Blankstein, Masheb, and Grilo (2006) found that the high personal standards linked to perfectionism were in themselves not maladaptive, but that it was the self-critical evaluative tendencies that were associated with depressive, anxious, and eating disorder symptoms. Similarly, Trumpeter, Watson, and O'Leary (2006) in their factor analytic study of the Multidimensional Perfectionism Scale (Hewitt & Flett, 1991), found that comparative self-criticism (being critical of yourself in comparison with others) was a key component of 'maladaptive perfectionism'. It has also been shown that in multiple regression analyses to predict depression, perfectionism ceased to be a significant predictor when self-criticism was entered into the model (Gilbert, Durrant, & McEwan, 2006), and that 'maladaptive evaluative concerns', a term that may reflect the same process of self-directed critical

evaluations, were associated with higher rates of comorbid Axis-I psychopathology (Bieling, Summerfeldt, Israeli, & Antony, 2004).

One mechanism by which self-critical thinking may contribute to these psychological problems is through the process of overgeneralisation. This is the tendency to make a global judgement about one's characteristics or ability across a range of situations or times, following a specific negative event. Beck's cognitive model of depression (Beck, Rush, Shaw and Emery, 1979) highlighted overgeneralisation as a common cognitive bias in depression. This model suggested that the depressed state is associated with cognitive deficits which predispose the individual to making more simplistic interpretations rather than incorporating more complex information. The type of global judgements likely to occur (e.g. I am a failure) were suggested to depend on earlier life experiences. Similarly, attribution-based approaches (e.g. Kelley & Michela, 1980) might suggest that overgeneralisation represents a maladaptive shifting of bias towards self-oriented, global, and stable attributions, or a lessening of typical self-serving biases. However, these models perhaps lack detail about how these processes occur.

According to the Interacting Cognitive Subsystems (ICS) model (Barnard & Teasdale, 1991; Teasdale, 1999; Teasdale & Barnard, 1993) it is the 'implicational' processing of schematic models encoding such globally negative themes (about the self, world or future) which immediately precedes the generation of depression. In this model, the processing of negative specific meanings (e.g. self-critical thoughts such as "I did badly on that task") contributes to the synthesis of higher-order schematic models (e.g. "I am worthless"), contributing to the generation of depression via this mechanism. Once the general schematic model has been generated, this leads to an increase in negative specific meanings and an 'interlock' occurs: a reciprocal cycle between the processing of specific and general meanings. The ease with which this reciprocal processing pattern occurs is considered a key component in determining an individual's vulnerability to depression. The model has also been applied to anorexia (see Park, Dunn, & Barnard, 2011), where specific negative thoughts around eating, weight, or appearance are hypothesised to activate implicational beliefs such as "I am out of control". Consistent with ICS, overgeneral negative self-views have been shown to predict future depressive symptoms (Carver, 1998; Dent & Teasdale, 1988).

There has been little experimental research into the process of overgeneralisation. One exception is a study by Wenzlaff and Grozier (1988) in which students were given predetermined failure feedback about a task purporting to assess social perceptiveness.

Depressed participants, unlike non-depressed participants, subsequently reported lower estimates of their *general* proficiency. It is possible that self-critical thinking was elicited by the task and resulted in such overgeneralisations, but self-critical thinking was not assessed directly. An experimental study by Rimes and Watkins (2005) found that analytical self-focused thinking increased ratings of the self as worthless and incompetent in depressed but not healthy participants; however, their paradigm was designed to elicit analytic self-focused cognition in general rather than self-criticism specifically. Although global negative self-views or 'core beliefs' or 'schema' have been identified as being a key component across a range of clinical problems (Beck & Clark, 1988, 1997; Luck, Waller, Meyer, Ussher, & Lacey, 2005), the process of overgeneralisation has rarely been studied, particularly outside of the field of depression.

The aim of the present study was to directly investigate the relationship between self-criticism and overgeneralisation, and to compare this across two clinical disorders where self-criticism is common (depression and eating disorders) in order to explore these cognitive processes from a more transdiagnostic perspective. Tasks designed to elicit self-critical thoughts were used to investigate the following hypotheses:

1. Compared to the control group, the two clinical groups will report more self-critical thinking and greater endorsement of global negative self-views (overgeneralisation) following a failure experience, adjusting for baseline levels. There will be no significant difference between the clinical groups.
2. Compared to the other two groups, the eating disorder group will show significantly more body/appearance-related self-critical thinking and overgeneralisation after a task focusing on body image, adjusting for baseline levels.
3. Self-critical thinking will be a significant predictor of overgeneralisation after each task.
4. Self-critical thinking and overgeneralisation will both be associated with increases in low mood after each task but overgeneralisation will show the stronger association.

Method

Participants

The study recruited 78 participants in total across three groups: current major depressive disorder (n=26), a current eating disorder (n=26), and no current or historical mental health difficulties (n=26).

Participants in the two clinical groups were recruited from local mental health services, where eligible participants were approached initially by a member of their clinical team. Additionally, study information and advertising material was distributed to local voluntary and charitable organisations, public buildings, and relevant online forums. Participants in the third (control) group were recruited primarily from university student and staff populations, with wider local recruitment where possible. All participants met group inclusion criteria and were aged 18 or over. Exclusion criteria were high levels of risk (identified by clinician), or difficulties with written/spoken English. Participants were reimbursed for their time using vouchers or, where relevant, course credit.

Design

The study used a 3 x 2 (Group by Time i.e. before and after each task) between and within-participant design to compare the impact of two tasks across the three groups, with global negative self-views as the main dependent variable.

Materials

Diagnostic Interview.

The Mini International Neuropsychiatric Interview (MINI; Version 6.0.0; Sheehan et al., 1998) is a brief structured interview protocol with good reliability and validity (Lecrubier et al., 1997) that screens for the presence of major Axis I psychiatric disorders, as outlined in DSM-IV and ICD-10.

Questionnaire measures.

The following standardised measures were used:

- Habit Index of Negative Thinking (HINT; Verplanken, Friborg, Wang, Trafimow, & Woolf, 2007). A measure of habitual self-critical thinking as a cognitive process, the HINT has good psychometric properties (Verplanken et al., 2007) and internal consistency; Cronbach's alpha in this study was 0.97.
- Frost Multidimensional Perfectionism Scale (MPS; Frost, Marten, Lahart, & Rosenblate, 1990). Analyses used the MPS Negative Perfectionism subscale, which is computed as the total of the following subscales: Concern over Mistakes, Doubting of Actions, Parental Expectations, and Parental Criticism

(see Frost, Heimberg, Holt, Mattia, & Neubauer, 1993). Cronbach's alpha was 0.94.

- Centre for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). The CES-D is a widely used and validated brief measure of depression symptoms (see Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977). Cronbach's alpha was 0.93.
- Eating Disorder Examination Questionnaire (EDE-Q; Fairburn & Beglin, 2008). A general measure of self-reported eating disorder symptoms, the present study used the global scale of the EDE-Q, which averages the four subscales of Restraint, Eating Concern, Weight Concern, and Shape Concern. Cronbach's alpha was 0.96.

Participants also completed brief demographic questions and questions regarding current or previous treatments for mental health difficulties.

Visual analogue scales: Self-criticism, global negative self-views, and mood.

Based on those used in Wenzlaff & Grozier (1988) and Rimes & Watkins (2005), these scales have been shown to be sensitive to change in experimental studies. The following feelings or experiences were rated on a 0 (not at all) to 100 (extremely) scale: competent, acceptable to others, worthless, unlovable, low in mood, self-critical, and self-critical about my body or appearance.

Participants were asked to rate how they were feeling at the time of completion, apart from the last two scales, where they were asked to consider the past five minutes. 'Worthless', 'unlovable', 'competent' and 'acceptable to others' (final two reverse scored) were averaged to form a composite indicator of global negative self-views (see Rimes & Watkins, 2005).

Verbal Ability Task.

This task was adapted from the 'Remote Associates Task' originally described in Mednick (1962). Three 'clue' words are given (e.g. "teacher", "primary", "learning"), and the task is to produce a fourth word that can be combined with all the clues, either by making a compound phrase or semantic association (e.g. "school"). These can vary in difficulty, and a difficult version of the task has been used in previous research in perfectionism as a trigger for self-critical thinking (Schneider, Gerstenberg, Altstotter-Gleich, Zureck, & Schmitt, 2012). Twenty difficult and twenty easy task items were selected for this study following piloting that demonstrated that no participants were able to successfully answer

all of the difficult items in the time available, that the difficult items were effective in eliciting self-critical thoughts, and that the easy items were effective in reducing these.

Participants were given instructions and an example set of clue words and their solution. They were given 3 minutes to complete the difficult items. Following this they completed the easy items, for which they were allowed 5 minutes. No performance feedback was provided by the researcher; participants' evaluations of performance and failure experiences were therefore self-generated.

Body Image Task.

Adapted from tasks described in Shafran, Lee, Payne and Fairburn (2007) and Forbes, Adams-Curtis, Rade, and Jaberg (2001), this task was designed to trigger negative comparisons of the self with people in the images shown. Advertisements featuring idealised male and female images were selected from popular men's and women's magazines, which were piloted to select 10 male and 10 female images that showed the strongest negative impact on viewers' own self-image. Additionally, two further advertisements not featuring people were added to each set to disguise the nature of the task.

Participants were asked to view each image for five seconds, then provide ratings on a 5-point Likert scale (ranging from 1=Strongly Agree, to 5=Strongly Disagree) for the following statements:

- The style of this image appeals to me.
- This image would catch my eye if I was flipping through a magazine.
- It is clear what this image is trying to promote.
- This is a memorable image.

These instructions were designed to hide the purpose of the task while ensuring participants fully viewed and engaged with each image.

Procedure

The study design and procedures were ethically approved by both the National Research Ethics Committee (Study Reference 13/WA/0158), the University of Bath Departmental Ethics Committee (Study References 12/171 & 13/135) and local NHS Research and Development offices. Potential participants were provided with an information sheet and the opportunity to ask questions. Suitability for the study was then assessed via telephone using the Mini International Neuropsychiatric Interview (MINI; Sheehan et al., 1998) to

ensure appropriate diagnostic criteria were (or were not) met to permit inclusion in the study.

Eligible volunteers were sent a consent form and questionnaire pack to complete at home. The researcher then met with participants who provided written informed consent to collect the questionnaire pack and undertake the experimental tasks. This meeting followed the structure below:

1. Information about the experimental session
2. Completion of visual analogue scales (VAS) – time A
3. Verbal Ability Task – part 1 (difficult; ‘failure experience’)
4. VAS – time B
5. Verbal Ability Task – part 2 (easy)
6. VAS – time C
7. Body Image Task
8. VAS – time D
9. Full debrief, including optional relaxation exercise for participant wellbeing

Task order was not counterbalanced because although there was a method for negating the effects of the failure experience in the Verbal Ability Task (i.e. part 2 in which participants experience success at the task), there was no such method available to ameliorate the impact of the Body Image Task.

Data Analysis

Data were analysed using SPSS version 20. One participant from the depression group was excluded from analyses of the verbal ability task due to misunderstanding the instructions. Missing questionnaire data were replaced with the mean score given for items in the same subscale.

The change in scores on the composite measure of global negative self-views before and after each of the tasks was computed to produce a single variable of overgeneralisation (i.e. post-task minus pre-task ratings). Overgeneralisation scores for the verbal ability task were found to be positively skewed, therefore a square root transformation (including a constant to remove negative values) was performed to realign scores with the normal distribution prior to analysis.

Results

Demographics of Sample

The demographic information for the study participants is shown in Table 1. T-tests and chi-square analyses were used to compare the three groups. Response options were combined as follows to ensure sufficient cell counts: White ethnic background versus other ethnic background (Fisher's Exact Probability Test); 'University degree' versus lower qualification; Partner versus no partner; Work/study versus other employment status; 'Living comfortably' versus 'Doing alright' versus other financial status. Only the clinical groups were compared regarding psychiatric medication.

| | | Control n=26 | Depression n=26 | Eating Disorder n=26 | Test statistic |
|---|--|-----------------|--------------------|-------------------------|------------------------|
| Mean Age (SD) | | 26 (12) | 45 (13) | 28 (7) | $F(2,75)=20.7, p<.001$ |
| % Female | | 54 | 81 | 100 | $\chi^2=16.4, p<.001$ |
| Ethnic Origin (%) | White British | 77 | 100 | 92 | $\chi^2=1.9, p=.538$ |
| | White Irish | 4 | 0 | 0 | |
| | Any other White background | 11 | 0 | 0 | |
| | Chinese | 8 | 0 | 4 | |
| | No response | 0 | 0 | 4 | |
| Highest Educational Qualification Completed (%) | University Degree | 38 | 46 | 62 | $\chi^2=2.9, p=.238$ |
| | A Levels, Vocational Qualification or equivalent | 62 | 27 | 38 | |
| | GCSEs, O Level or equivalent | 0 | 23 | 0 | |
| | No formal qualifications | 0 | 4 | 0 | |
| Marital Status (%) | Single | 46 | 19 | 54 | $\chi^2=.1, p=.956$ |
| | Partner, Living apart | 19 | 4 | 12 | |
| | Married/living together | 15 | 42 | 31 | |
| | Divorced/ separated | 0 | 35 | 4 | |
| | Widowed | 0 | 0 | 0 | |
| | No response | 20 | 0 | 0 | |
| Employment Status (%) | Full time work | 38 | 23 | 27 | $\chi^2=14.0, p=.001$ |
| | Part time work | 0 | 19 | 4 | |
| | Student | 54 | 8 | 15 | |
| | Unemployed | 4 | 11 | 8 | |
| | Temporary sick | 0 | 19 | 38 | |
| | Permanent sick/disabled | 0 | 8 | 4 | |
| | Retired | 4 | 4 | 0 | |
| | Looking after children | 0 | 4 | 0 | |
| | Being a carer | 0 | 4 | 0 | |
| | No response | 0 | 0 | 4 | |
| | | | | | |
| Financial Status (%) | Living comfortably | 31 | 15 | 31 | $\chi^2=6.7, p=.151$ |
| | Doing alright | 35 | 27 | 31 | |
| | Just about getting by | 19 | 19 | 31 | |
| | Finding it difficult to make ends meet | 0 | 38 | 4 | |
| | No response | 15 | 0 | 4 | |
| % Currently on Psychiatric Medication | | 0 | 65 | 54 | $\chi^2=.3, p=.572$ |

Table 1. Demographic information for the study participants.

Clinical Characteristics of Sample

Within the eating disorder group, 62% had a diagnosis of Anorexia Nervosa, 8% Bulimia Nervosa, and 15% ED-NOS. The remaining 15% met MINI screening criteria for Bulimia Nervosa.

Participants in the two clinical groups met diagnostic criteria for various psychiatric conditions, which are shown in Table 2.

| Diagnostic Criteria met | Depression group (n=26) | Eating Disorder group (n=26) |
|--|------------------------------------|---|
| Depression (%) | 100 | 46 |
| Eating Disorder (%) | 0 | 100 |
| Agoraphobia without panic disorder (%) | 31 | 38 |
| OCD (%) | 19 | 19 |
| Social phobia (%) | 15 | 27 |
| PTSD (%) | 23 | 8 |
| Alcohol dependence (%) | 27 | 0 |
| GAD (%) | 4 | 4 |
| Panic disorder with agoraphobia (%) | 4 | 12 |
| Panic disorder without agoraphobia (%) | 8 | 8 |
| Bipolar disorder (%) | 0 | 1 |
| Any comorbid psychiatric condition (%) | 77 | 81 |

Table 2. Percentages of participants in each clinical group who met MINI screening criteria for psychiatric conditions.

A one-way ANOVA analysis of scores on the depression and eating disorder questionnaires indicated that both clinical groups showed significantly greater depression symptoms, as measured by the CES-D, compared to the control group (See Table 3). Similarly, scores on the EDE-Q were significantly greater for the clinical groups versus control, but the eating disorder group scores were also greater than the depression group.

| | Control Mean (SD) | Depression Mean (SD) | Eating Disorder Mean (SD) | ANOVA |
|----------------------------------|-----------------------------|--------------------------------|-------------------------------------|-------------------------|
| Depression Symptoms (CES-D) | 11 (7) | 35 ^a (9) | 31 ^a (10) | $F(2,75)= 53.5, p<.001$ |
| Eating Disorder Symptoms (EDE-Q) | 1.11 (0.97) | 2.54 (1.38) | 4.20 (0.98) | $F(2,75)= 49.5, p<.001$ |

Table 3. Group means and standard deviations (in brackets) of the CES-D and EDE-Q data. Values within a row that share a superscript are not significantly different (Post-hoc Tukey HSD).

Task Manipulation Checks: Changes in self-critical thinking

To check whether participants attempted and solved fewer of the hard than the easy puzzles as intended, 3 (group) by 2 (difficulty) ANOVAs were conducted. A significant main effect of difficulty was found for both the number of puzzles attempted (Wilks' Lambda= .11, $F(1, 74)= 628.0$, $p<.001$) and the number correctly solved (Wilks' Lambda= .10, $F(1, 74)= 708.6$, $p<.001$). On average, participants attempted fewer of the hard puzzles ($M=4.8$, $SD=3.9$) than easy puzzles ($M=16.3$, $SD=3.4$), and correctly solved fewer hard puzzles ($M=2.2$, $SD=1.7$) than easy puzzles ($M=13.9$, $SD=4.2$). There was no main effect of group for the number of puzzles attempted ($F(2, 74)= 2.0$, $p=.144$) or solved ($F(2, 74)= 0.4$, $p=.646$), and no difficulty by group interaction for puzzles attempted ($F(2, 74)= 0.4$, $p=.662$) or solved ($F(2, 74)= 0.8$, $p=.449$).

To assess the effectiveness of the tasks in eliciting self-critical thoughts, paired t-tests were calculated comparing participants' ratings of the extent of self-critical thinking experienced over the past five minutes at times A and B (verbal ability task), and also at times C and D (body image task). Mean ratings of self-critical thinking increased from 41.4 ($SD=26.1$) at time A to 65.3 ($SD=29.0$) at time B: $t(76)= -8.6$, $p<.001$, indicating the failure experience was effective in eliciting self-critical thoughts. The body image task led to a significant increase in body/appearance-related self-critical thinking from mean ratings of 30.4 ($SD=28.1$) at time C to 46.0 ($SD=32.5$) at time D: $t(77)= -5.8$, $p<.001$, but no change in the general self-critical thinking VAS: $t(77)= .4$, $p=.667$.

To assess the effectiveness of the easy puzzles in reducing participants' levels of self-critical thinking, paired t-tests were used to compare levels of self-critical thinking at times B and C. The decrease in ratings from time B ($M=65.3$, $SD=29.0$) to time C ($M=50.0$, $SD=27.9$) was significant: $t(76)= 7.7$, $p<.001$, indicating the easy puzzles were effective in reducing self-critical thinking. A one-way ANOVA of the change in self-critical thinking from time B to time C showed there were no differences between the groups: $F(2,74)= .004$, $p=.996$.

Changes in mood and global negative self-views after each task

Paired t-tests comparing pre- and post-task VAS scores indicated that the verbal ability task was associated with significant increases in low mood and global negative self-views, but that the body image task was not (see Table 4.).

| | | Before: Mean (SD) | After: Mean (SD) | Test statistic |
|------------|----------------------------|-----------------------------|----------------------------|--------------------------|
| Failure | Low mood | 47.8 (24.9) | 54.6 (26.3) | $t(76) = -2.8, p = .006$ |
| Induction | Global negative self-views | 42.7 (20.9) | 54.0 (25.7) | $t(76) = -7.3, p < .001$ |
| Body | Low mood | 48.3 (24.9) | 46.6 (24.2) | $t(77) = .9, p = .355$ |
| Image Task | Global negative self-views | 43.7 (22.2) | 42.9 (22.1) | $t(77) = .9, p = .367$ |

Table 4. Ratings of low mood and global negative self-views before and after each task.

Testing of Study Hypotheses

Hypothesis 1: Compared to the control group, the two clinical groups will report more self-critical thinking and greater endorsement of global negative self-views (overgeneralisation) following a failure experience, adjusting for baseline levels. There will be no significant difference between the clinical groups.

While analysis of covariance (ANCOVA) was planned to test group differences after the tasks, for the first analysis involving self-critical thinking, the assumption of homogeneity of regression slopes was not met. A one-way ANOVA was therefore conducted to compare the extent of change in self-critical thinking between baseline (time A) and following the failure experience generated by the verbal ability task (time B), using a change score of time B ratings minus time A. A significant group difference was found: $F(2,74) = 3.1, p = .049$. Post-hoc Tukey HSD analysis revealed that the depression group experienced a greater increase in self-critical thinking compared to the control group ($p = .048$); other post-hoc group comparisons for self-critical thinking were not significant. Group means and standard deviations for self-critical thinking and other VAS are presented in Table 5.

| | | Control Mean (SD) | Depression Mean (SD) | Eating Disorder Mean (SD) |
|--|---|-----------------------------|--------------------------------|-------------------------------------|
| Self-critical thinking | A | 22.4 (18.6) | 44.0 (20.5) | 57.8 (25.7) |
| | B | 39.8 (24.3) | 77.5 (20.8) | 79.2 (23.1) |
| | C | 24.5 (18.9) | 61.0 (21.0) | 63.6 (24.3) |
| | D | 26.4 (24.8) | 56.1 (25.6) | 63.8 (24.6) |
| Body/appearance related self-critical thinking | A | 24.3 (23.5) | 43.9 (26.7) | 59.6 (28.3) |
| | B | 21.7 (24.1) | 34.6 (28.6) | 56.1 (27.1) |
| | C | 18.0 (21.6) | 28.9 (27.1) | 44.4 (29.5) |
| | D | 28.3 (28.4) | 46.6 (30.8) | 63.0 (29.5) |
| Global Negative self-views | A | 23.3 (12.4) | 52.6 (17.9) | 52.6 (16.6) |
| | B | 28.0 (13.6) | 65.7 (20.2) | 68.8 (19.1) |
| | C | 22.5 (11.6) | 54.0 (20.5) | 54.5 (16.2) |
| | D | 22.2 (12.6) | 52.8 (20.9) | 53.9 (15.5) |
| Low mood | A | 30.3 (19.3) | 61.3 (22.5) | 52.5 (22.3) |
| | B | 31.3 (17.8) | 67.0 (23.0) | 65.9 (20.8) |
| | C | 28.6 (20.4) | 57.0 (24.1) | 59.3 (17.5) |
| | D | 27.8 (21.5) | 57.1 (20.9) | 54.9 (18.7) |

Table 5. The group means and standard deviations (in brackets) of the VAS ratings (0-100) across times A (baseline), B (post hard word puzzles), C (post easy word puzzles), and D (post body image task).

For global negative self-views after the failure induction (time B), accounting for these at time A, a one-way ANCOVA showed the groups were significantly different: $F(2,73)= 7.7$, $p=.001$, partial $\eta^2= .175$. Post-hoc pairwise comparisons (using Bonferroni correction) indicated that both the depression and eating disorder groups showed greater overgeneralisation compared to the control group ($p<.008$), and that there was no difference between the two clinical groups (see Figure 1.)

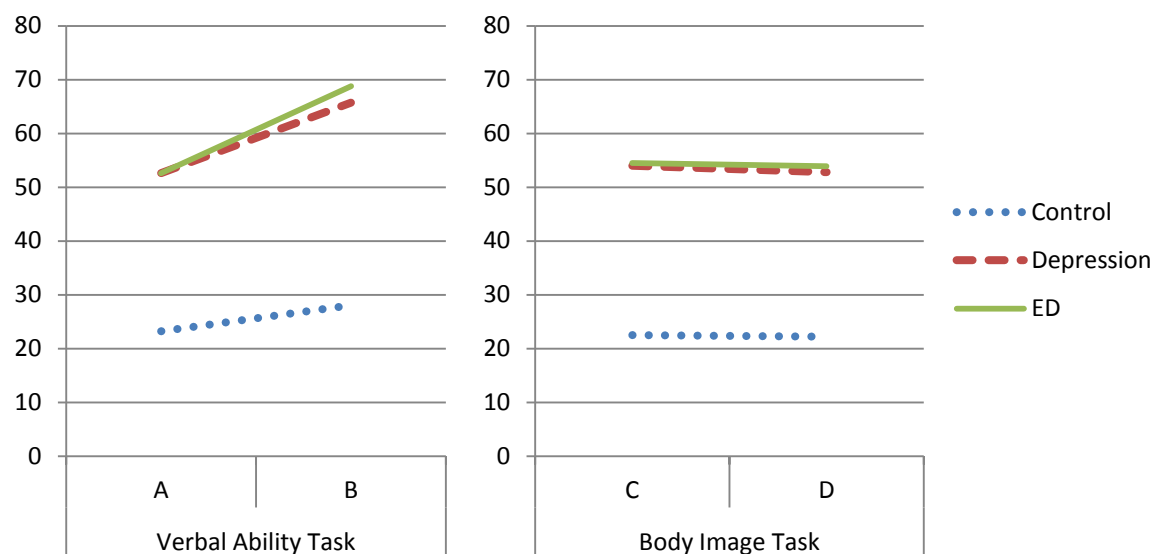


Figure 1. Participants' mean global negative self-views (0-100) at times A (baseline), B (post hard word puzzles), C (post easy word puzzles), and D (post body image task). Any increase in ratings indicates overgeneralisation.

Hypothesis 2: Compared to the other two groups, the eating disorder group will show significantly more body/appearance-related self-critical thinking and overgeneralisation after a task focusing on body image, adjusting for baseline levels.

A one-way ANCOVA indicated that the groups did not differ in the extent of body/appearance-related self-critical thinking following the body image task (time D) when ratings prior to this task (time C) were accounted for as a covariate: $F(2,74) = 2.7$, $p = .075$, partial $\eta^2 = .068$.

A further one-way ANCOVA showed there was no group difference for global negative self-views following the body image task (time D), using time C ratings as the covariate: $F(2,74) = .5$, $p = .611$, partial $\eta^2 = .013$ (See Figure 1).

Hypothesis 3: Self-critical thinking will be a significant predictor of overgeneralisation after each task.

Correlational and multiple regression analyses were undertaken to investigate the relationship between self-critical thinking and overgeneralisation. The change in self-criticism ratings following the verbal ability task (time B minus time A) was significantly correlated with overgeneralisation (change in global negative self-views): ($r = .494$, $p < .000$).

Habitual self-criticism as measured by the HINT was also significantly correlated with overgeneralisation ($r=.252$, $p=.027$), though MPS Negative Perfectionism ($r=.120$, $p=.300$), and CES-D ($r=.111$, $p=.335$) scores were not. To compare their relative contributions, habitual self-criticism and task-related increases in self-criticism were entered into a stepwise multiple regression analysis. Only the latter was a significant predictor (results as indicated by the correlation analysis above).

On the body image task, changes in body/appearance-related self-criticism (time D minus time C) significantly correlated with changes in global negative self-views due to the task ($r=.304$, $p=.007$). Scores on the HINT ($r=-.054$, $p=.638$), MPS Negative Perfectionism ($r=-.043$, $p=.712$), and CES-D ($r=.019$, $p=.867$) were not significantly correlated with changes in global negative self-views.

Hypothesis 4: Self-critical thinking and overgeneralisation will both be associated with increases in low mood after each task but overgeneralisation will show the stronger association.

Correlation analyses indicated that after the verbal ability task, increases in low mood were significantly associated with overgeneralisation ($r=.524$, $p<.001$) and increases in self-criticism ($r=.377$, $p=.001$). A stepwise multiple regression including overgeneralisation and change in self-criticism (time A to time B) showed that overgeneralisation was the only significant predictor of change in low mood ratings (time A to time B): $F(1,75)= 28.3$, $p<.001$, Adjusted $R^2=.264$, $\beta=.524$.

After the body image task, increases in low mood were significantly correlated with changes in global negative self-views ($r=.523$, $p<.001$) but not with increases in body/appearance-related self-criticism ($r=.099$, $p=.390$).

Supplementary analyses

Due to the high rate of comorbid depression in the eating disorder group, exploratory analyses were undertaken to investigate whether the participants with comorbid depression ($n=12$) differed from those without ($n=14$) on the questionnaire measures and their response to the tasks. There were no significant group differences in pre-post task changes in self-critical thinking, global negative self-views or mood (see Appendix VII).

Discussion

This study has demonstrated that following the failure experience during the verbal ability task, which elicited self-critical thinking in all three groups, participants in the depression and eating disorder groups showed significantly greater endorsement of global negative self-views compared to controls. This is consistent with the primary hypothesis and can be viewed as an example of overgeneralisation; a specific negative event leading to an increase in more generalised, global self-judgements. Such overgeneralisation following experimentally-induced failure experiences is consistent with a previous study in depressed students using a different task (Wenzlaff & Grozier, 1988). To the authors' knowledge, this is the first experimental demonstration of overgeneralisation following failure experiences among participants with eating disorders.

Depressed participants showed significantly more self-criticism after the failure experience than the control group, but were not significantly different from the eating disorder group. The eating disorder group did not show significantly more self-criticism than the control participants, although this may be a power issue.

The finding of increases in global negative self-judgements after specific failure experiences in people with depression but not in healthy participants is consistent with Beck's suggestion that overgeneralisation is a feature of the depressed state (Beck et al., 1979). Both Beck's cognitive model and the ICS approach assume that prior life experiences will influence the nature of the 'core beliefs' or 'schematic models' that come to be processed. The current findings also provide support for the ICS mechanisms of 'depressive interlock' (see Teasdale, 1999). This describes a self-perpetuating processing pattern in which self-critical (propositional) thinking maintains the processing of schematic models encoding higher order meanings with global negative views of the self. The ICS approach suggests when cognitive processing is dominated by propositional thinking such as self-criticism, this prevents the wider, integrated processing necessary to modify the current dysfunctional (implicational) schematic model. ICS may therefore constitute a more helpful level of understanding not provided by Beck's cognitive models or attributional approaches which identify overgeneral thinking as a key characteristic of depression but are less specific about how overgeneralisation occurs.

The present findings suggest that self-critical and overgeneralisation processes occur similarly across people with depression and eating disorders, and that these processes seem to represent an exaggerated form of those occurring in people without current mental health difficulties. This supports the idea that it may be useful to consider these

processes from a more transdiagnostic perspective; whereas in the past these processes, particularly overgeneralisation, have been examined predominantly in depression. Further studies could examine the transdiagnostic element further with participants experiencing other conditions. The Interacting Cognitive Subsystems model, originally discussed in relation to depression, has been more recently applied to eating disorders (Park, Dunn, & Barnard, 2011) and may hold promise for other disorders too. It should be noted however that the eating disorder group showed relatively high levels of secondary depressive symptomatology, so further research is needed in clinical groups without comorbid depression.

Contrary to the second hypothesis there was no difference in body/appearance-related self-criticism between the clinical groups following a task thought to be more relevant to the concerns of people with an eating disorder. However, there was also no difference between these and the control group, suggesting the task may require development in future studies to more strongly elicit body/appearance-related self-criticism. This could include asking questions relating directly to one's own appearance in comparison to the images being viewed. Such questions had not been included in the present study as it was anticipated that this would make the true purpose of the task (eliciting self-criticism) too obvious.

Self-critical thinking in both habitual, and state, forms were significantly associated with the extent of overgeneralisation following failure experience on the verbal ability task, with the latter being the stronger predictor of the two. The third hypothesis was therefore supported and provides evidence for the cognitive mechanisms described in the ICS model (Teasdale, 1999), where specific self-critical thoughts (propositional level) contribute to the generation of higher order global negative self-views (implicational level). MPS Negative perfectionism was not significantly associated with overgeneralisation on the verbal ability task, and this is consistent with previous evidence suggesting self-criticism is a key component in the association between perfectionism and depressive symptoms (Gilbert et al., 2006), rather than just an aspect of perfectionism.

As expected, increases in both self-criticism and global negative self-views were associated with increases in low mood following the failure experience on the verbal ability task. Consistent with a prediction derived from the ICS model (Barnard & Teasdale, 1991), when both self-critical thinking and global negative self-views were entered into a regression model, only the latter significantly predicted increases in low mood. This model asserts that the processing of this type of overgeneral (implicational) beliefs is key for the

development of depression rather than specific (propositional) negative thinking. The regression findings support this mechanism, though must be interpreted with caution in that changes in self-criticism, mood, and overgeneralisation were measured at the same point in time, i.e. after each task. As such the direction of causality cannot be fully ascertained, and it is assumed the relationship between self-criticism, global negative self-views and low mood will be interactive.

While the present findings provide support for the ICS mechanisms of 'depressive interlock', this model is arguably less clear in its ability to state precisely which components or processes are dysfunctional in depressed mood. Other theories have attempted to account for the distinction between appropriate 'generalisation', that is learning and extrapolating from experience, and dysfunctional 'overgeneralisation', where this process is exaggerated sufficiently to be problematic (see Epstein, 1992 for discussion of this in relation to cognitive-experiential self theory).

Other limitations of the study include the reliance on self-report approaches, though this is to an extent unavoidable due to the internal nature of self-critical thinking. There were some demographic group differences, and a high rate of comorbid depression in the eating disorder group, which may have reduced the independence of the clinical groups. To address the latter issue, exploratory comparisons of participants in the eating disorder group with and without comorbid depression were undertaken. Although caution in interpretation is required due to the small sample sizes, there was little indication that these two groups responded differently to the experimental tasks.

The present findings in people with existing clinical problems cannot address the issue of whether a tendency toward greater self-criticism in response to a difficult situation occurs prior to the onset of psychological difficulties, as a result of them, or both, and to what extent this might be expected to change following psychological therapy. Exploration of self-critical thinking among people with remitted difficulties would help to identify the extent to which self-critical thinking and its effects are a state component of depression or eating disorders as opposed to a trait characteristic.

This study may carry implications for how self-criticism is conceptualised in the literature more broadly. Firstly, the task-related increase in self-critical thinking observed in all groups perhaps questions the tendency to focus on self-criticism as a stable construct of personality. Secondly, the observed link between self-criticism and overgeneralisation

demonstrates the value of investigating the cognitive mechanisms by which self-critical thinking may contribute to distress.

Although these results suggest that self-criticism may be a key process in the generation of global negative self-beliefs, and these in turn are important in low mood, it remains an open question how best to intervene with this process. Future research could examine whether it is more clinically effective to target the self-critical thinking, the process by which this leads to overgeneralisation, or the global negative self-views themselves.

Overall, this study has demonstrated that following a failure experience, both clinical and nonclinical populations show a significant increase in self-critical thinking; however, compared to healthy individuals, participants with depression or eating disorders showed greater overgeneralisation, i.e. an increase in global negative self-views. Both habitual and state increases in self-criticism were associated with the extent of overgeneralisation, and overgeneralisation in turn was associated with increases in low mood. These results provide evidence that self-criticism and overgeneralisation may be important across different clinical conditions and merit further research attention in their own right.

References

- Barnard, P. J., & Teasdale, J. D. (1991). Interacting cognitive subsystems: A systemic approach to cognitive-affective interaction and change. *Cognition & Emotion*, 5(1), 1-39.
- Beck, A. T., & Clark, D. A. (1988). Anxiety and depression: An information processing perspective. *Anxiety research*, 1(1), 23-36.
- Beck, A. T., & Clark, D. A. (1997). An information processing model of anxiety: Automatic and strategic processes. *Behaviour Research and Therapy*, 35(1), 49-58.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). Cognitive therapy of depression. New York: Guilford Press.
- Besser, A., Flett, G. L., & Hewitt, P. L. (2004). Perfectionism, cognition, and affect in response to performance failure vs. success. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 22(4), 297-324.
- Bieling, P. J., Summerfeldt, L. J., Israeli, A. L., & Antony, M. M. (2004). Perfectionism as an explanatory construct in comorbidity of axis I disorders. *Journal of Psychopathology and Behavioral Assessment*, 26(3), 193-201.
- Carver, C. S. (1998). Generalization, adverse events, and development of depressive symptoms. *Journal of Personality*, 66(4), 607-619.
- Cox, B. J., MacPherson, P. S. R., Enns, M. W., & McWilliams, L. A. (2004). Neuroticism and self-criticism associated with posttraumatic stress disorder in a nationally representative sample. *Behaviour Research and Therapy*, 42(1), 105-114.
- Cox, B. J., Rector, N. A., Bagby, R. M., Swinson, R. P., Levitt, A. J., & Joffe, R. T. (2000). Is self-criticism unique for depression? A comparison with social phobia. *Journal of affective disorders*, 57(1-3), 223-228.
- Cox, B. J., Walker, J. R., Enns, M. W., & Karpinski, D. C. (2002). Self-criticism in generalized social phobia and response to cognitive-behavioral treatment. *Behavior Therapy*, 33(4), 479-491.

- Dent, J., & Teasdale, J. D. (1988). Negative cognition and the persistence of depression. *Journal of abnormal psychology*, 97(1), 29.
- Dunkley, D. M., & Blankstein, K. R. (2000). Self-critical perfectionism, coping, hassles, and current distress: A structural equation modeling approach. *Cognitive Therapy and Research*, 24(6), 713-730.
- Dunkley, D. M., Blankstein, K. R., Masheb, R. M., & Grilo, C. M. (2006). Personal standards and evaluative concerns dimensions of "clinical" perfectionism: A reply to Shafran et al. (2002, 2003) and Hewitt et al. (2003). *Behaviour Research and Therapy*, 44(1), 63-84. doi: <http://dx.doi.org/10.1016/j.brat.2004.12.004>
- Dunkley, D. M., Masheb, R. M., & Grilo, C. M. (2010). Childhood maltreatment, depressive symptoms, and body dissatisfaction in patients with binge eating disorder: The mediating role of self-criticism. *International Journal of Eating Disorders*, 43(3), 274-281.
- Dunkley, D. M., Sanislow, C. A., Grilo, C. M., & McGlashan, T. H. (2009). Self-criticism versus neuroticism in predicting depression and psychosocial impairment for 4 years in a clinical sample. *Comprehensive Psychiatry*, 50(4), 335-346.
- Dunkley, D. M., Zuroff, D. C., & Blankstein, K. R. (2006). Specific perfectionism components versus self-criticism in predicting maladjustment. *Personality and Individual Differences*, 40(4), 665-676.
- Fairburn, C. G., & Beglin, S. (2008). Eating Disorder Examination Questionnaire. In C. G. Fairburn (Ed.), *Cognitive Behaviour Therapy and Eating Disorders*. New York: Guildford Press.
- Fennig, S., Hadas, A., Itzhaky, L., Roe, D., Apter, A., & Shahar, G. (2008). Self-criticism is a key predictor of eating disorder dimensions among inpatient adolescent females. *International Journal of Eating Disorders*, 41(8), 762-765.
- Forbes, G. B., Adams-Curtis, L. E., Rade, B., & Jaberg, P. (2001). Body dissatisfaction in women and men: The role of gender-typing and self-esteem. *Sex Roles*, 44(7), 461-484.
- Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, J. I., & Neubauer, A. L. (1993). A comparison of two measures of perfectionism. *Personality and Individual Differences*, 14(1), 119-126.
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14(5), 449-468.
- Gilbert, P., Durrant, R., & McEwan, K. (2006). Investigating relationships between perfectionism, forms and functions of self-criticism, and sensitivity to put-down. *Personality and Individual Differences*, 41(7), 1299-1308.
- Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of personality and social psychology*, 60(3), 456.
- Kelley, H. H., & Michela, J. L. (1980). Attribution theory and research. Annual review of psychology, 31(1), 457-501.
- Lecrubier, Y., Sheehan, D., Weiller, E., Amorim, P., Bonora, I., Harnett Sheehan, K. (1997). The Mini International Neuropsychiatric Interview (MINI). A short diagnostic structured interview: reliability and validity according to the CIDI. *European psychiatry*, 12(5), 224-231.
- Lehman, A. K., & Rodin, J. (1989). Styles of self-nurturance and disordered eating. *Journal of consulting and clinical psychology*, 57(1), 117.
- Luck, A., Waller, G., Meyer, C., Ussher, M., & Lacey, H. (2005). The role of schema processes in the eating disorders. *Cognitive Therapy and Research*, 29(6), 717-732.
- Luyten, P., Sabbe, B., Blatt, S. J., Meganck, S., Jansen, B., De Grave, C. (2007). Dependency and self-criticism: relationship with major depressive disorder, severity of depression, and clinical presentation. *Depression and anxiety*, 24(8), 586-596.

- Marshall, M. B., Zuroff, D. C., McBride, C., & Bagby, R. M. (2008). Self-criticism predicts differential response to treatment for major depression. *Journal of clinical psychology*, 64(3), 231-244.
- Mednick, S. (1962). The associative basis of the creative process. *Psychological review*, 69(3), 220.
- Mongrain, M., & Leather, F. (2006). Immature dependence and self-criticism predict the recurrence of major depression. *Journal of clinical psychology*, 62(6), 705-713.
- O'Connor, R. C., & Noyce, R. (2008). Personality and cognitive processes: Self-criticism and different types of rumination as predictors of suicidal ideation. *Behaviour Research and Therapy*, 46(3), 392-401.
- Park, R. J., Dunn, B. D., & Barnard, P. J. (2011). Schematic models and modes of mind in anorexia nervosa I: A novel process account. *International Journal of Cognitive Therapy*, 4(4), 415-437.
- Pinto-Gouveia, J., Castilho, P., Matos, M., & Xavier, A. (2013). Centrality of Shame Memories and Psychopathology: The Mediator Effect of Self-Criticism. *Clinical Psychology: Science and Practice*, 20(3), 323-334.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied psychological measurement*, 1(3), 385-401.
- Rector, N. A., Bagby, R. M., Segal, Z. V., Joffe, R. T., & Levitt, A. (2000). Self-Criticism and Dependency in Depressed Patients Treated with Cognitive Therapy or Pharmacotherapy. *Cognitive Therapy and Research*, 24(5), 571-584.
- Rimes, K. A., & Watkins, E. (2005). The effects of self-focused rumination on global negative self-judgements in depression. *Behaviour Research and Therapy*, 43(12), 1673-1681.
- Schneider, N., Gerstenberg, F., Altstotter-Gleich, C., Zureck, E., & Schmitt, M. (2012). *Perfectionism and the attribution of success and failure*. Paper presented at the Further Advances in Perfectionism Research Conference, York.
- Shafran, R., Lee, M., Payne, E., & Fairburn, C. G. (2007). An experimental analysis of body checking. *Behaviour Research and Therapy*, 45(1), 113-121.
- Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E. (1998). The Mini-International Neuropsychiatric Interview (MINI): the development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal of clinical psychiatry*, 59, 22-33.
- Stoeber, J., Hutchfield, J., & Wood, K. V. (2008). Perfectionism, self-efficacy, and aspiration level: differential effects of perfectionistic striving and self-criticism after success and failure. *Personality and Individual Differences*, 45(4), 323-327.
- Taranis, L., & Meyer, C. (2010). Perfectionism and compulsive exercise among female exercisers: High personal standards or self-criticism? *Personality and Individual Differences*, 49(1), 3-7.
- Teasdale, J. D. (1999). Emotional processing, three modes of mind and the prevention of relapse in depression. *Behaviour Research and Therapy*.
- Teasdale, J. D., & Barnard, P. J. (1993). *Affect, cognition, and change: Re-modelling depressive thought*. Hove: Lawrence Erlbaum.
- Trumpeter, N., Watson, P. J., & O'Leary, B. J. (2006). Factors within Multidimensional Perfectionism Scales: Complexity of relationships with Self-Esteem, Narcissism, Self-Control, and Self-Criticism. *Personality and Individual Differences*, 41(5), 849-860.
- Verplanken, B., Friborg, O., Wang, C. E., Trafimow, D., & Woolf, K. (2007). Mental habits: Metacognitive reflection on negative self-thinking. *Journal of personality and social psychology*, 92(3), 526.
- Weissman, M. M., Sholomskas, D., Pottenger, M., Prusoff, B. A., & Locke, B. Z. (1977). Assessing depressive symptoms in five psychiatric populations: a validation study. *American Journal of Epidemiology*, 106(3), 203-214.
- Wenzlaff, R. M., & Grozier, S. A. (1988). Depression and the magnification of failure. *Journal of abnormal psychology*, 97(1), 90.

Whelton, W. J., Paulson, B., & Marusiak, C. W. (2007). Self-criticism and the therapeutic relationship. *Counselling Psychology Quarterly*, 20(2), 135-148.

N.B.

The outline of a secondary research paper arising from the Main Research Project, including partial results, is presented in Appendix VIII.

Executive Summary for Main Research Project

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Executive Summary for Main Research Project

Primary Paper:

Self-critical thinking and overgeneralisation in depression and eating disorders: An experimental study

Self-critical thinking is common across a range of mental health difficulties, and can include blaming, negative, or judgemental thoughts about ourselves, which can significantly interfere with psychological therapy processes. Surprisingly there has been very little research into self-critical thinking as a mental process – most research suggests that being self-critical is a personality style, or that it is just an aspect of perfectionism, where people criticise themselves for failing to meet their own high standards.

This study aimed to explore the idea of self-critical thinking as a mental process in its own right. Research has shown that following an experience of failure on a short experimental test, people with depression showed a tendency to rate themselves as being generally much less proficient. We hypothesised that self-critical thinking may be important in this process of ‘overgeneralisation’, where people can move from a specific negative experience (e.g. failing a task) to a more general negative view of ourselves (e.g. I am an incompetent person). We aimed to explore whether these processes were unique to depression or whether they occur similarly in other clinical conditions.

Two experimental tasks were used in this study, both designed to generate some self-critical thoughts for the participants who completed them. One involved attempting word puzzles of varying degrees of difficulty, the second focused on body image and appearance concerns in response to a range of male or female magazine images.

Three groups of participants took part: people with depression, people with an eating disorder, and people with no current or historical mental health difficulties. There were 26 people in each group.

Results showed that following an experience of task failure, all groups experienced an increase in self-critical thinking, but that both the clinical groups more strongly endorsed general negative views of themselves (i.e. greater overgeneralisation) compared to the nonclinical control group.

The amount of self-critical thinking, but not the amount of unhelpful perfectionism, was associated with how much overgeneralisation occurred, and this overgeneralisation in turn predicted how much participants' ratings of low mood increased following the task.

These results suggest that following a specific negative experience, self-critical thinking appears to contribute to the process of overgeneralisation that leads to general negative views of ourselves, and that this process is exaggerated when someone is experiencing a clinical condition. General negative views have been shown to contribute to depression, and were linked to a drop in mood in this study.

More broadly, these findings suggest that it may be appropriate to consider self-critical thinking further as a separate construct rather than grouping it with perfectionism. As the two clinical groups in this study generally did not differ in terms of self-critical and overgeneralisation processes it is suggested that taking a broader view of these processes that cuts across standard diagnostic categories could be considered.

At a clinical level, this study perhaps highlights the need to assess and remain aware of patterns of self-critical thinking, including specific and more general thoughts. It is suggested that studying people with remitted difficulties may help to understand if and how psychological therapies can help to address self-critical thinking patterns.

Secondary Paper:

Self-critical thinking: phenomenology, lived experience, and relationship to other constructs

The outline of the secondary paper is presented in Appendix VIII. The aim of this paper was to explore the content and experience of self-critical thinking, and to examine further how self-critical thinking relates to other psychological factors such as self-esteem, rumination, and self-compassion.

The study participants described above also completed a questionnaire pack assessing various psychological factors, and a semi-structured interview about their experiences of self-critical thinking. They also provided information and ratings on which aspects of themselves they tend to be critical about and how they feel about this.

Results indicated that self-critical thinking showed strong relationships with the other psychological factors measured. Higher rates of self-critical thinking were a better predictor of depression symptoms than unhelpful perfectionism.

As expected the eating disorder group experienced most frequent self-critical thoughts about eating, shape and weight, and appearance, though this was in addition to frequent self-criticism about their feelings and mood, which were the most common topics in the depression group.

The two clinical groups reported that self-critical thinking has a bigger negative impact on their general functioning compared to the control group. They also rated their self-criticism as less controllable with more disadvantages. The eating disorder group rated self-criticism as having more benefits than the depression group. Some participants described significant difficulties, with self-critical thinking patterns greatly impacting on activity, mood, and general quality of life.

These findings will be considered further alongside participants' comments during the interview section of the study. The final paper will aim to convey the impact and experience of self-critical thinking, highlighting how this may differ in the context of mental health difficulties.

Connecting Narrative

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Connecting Narrative

This connecting narrative relates to the following work:

- **Critical Literature Review:** Hoarding among older adults: An evaluative review
- **Service Improvement Project:** Service user perspectives on the use of outcome measures in psychological therapy
- **Main Research Project:** Self-critical thinking and overgeneralisation in depression and eating disorders: An experimental study
- **Executive Summary for Main Research Project**
- **Appendix II - Service Improvement Project:** Service Responses to Findings and Recommendations
- **Appendix VIII - Main Research Project:** Outline of Secondary Paper
- **Case Study 1:** “Faith in myself”: Self-doubt in a client with Obsessive-Compulsive Disorder
- **Case Study 2:** Removal of dementia diagnosis following cognitive assessment: A case report
- **Case Study 3:** ‘Wow this is like science’: Behavioural experimentation of distraction techniques in a child with cannulation anxiety
- **Case Study 4:** Avoiding Meltdown: Sensory anxiety in a young man with Asperger’s Syndrome
- **Case Study 5:** Formulation as intervention: case report and client experience of formulating in therapy

Themes and Outcomes of the Research

As a whole, the research presented here seems to relate to a theme of investigating underresearched areas within clinical psychology, aiming to explore clinical presentations, techniques, processes, and perspectives that have to date received little research attention. This perhaps reflects a developing interest for me in the identification and exploration of these, where it feels that there are significant opportunities to offer original contributions to the field.

In general the research is in line with the intended aims, objectives and methodologies outlined in the original study proposals. The main project target for recruitment was met, and although sample size for the service improvement project (SIP) was small meaning some of the intended analyses were not possible, there were sufficient data to investigate the main study hypotheses. It is hoped that the papers will be considered as making helpful contributions to their respective fields, and will be submitted to relevant peer-

reviewed journals as the principal method for dissemination. In addition to this, the SIP has been accepted as a poster presentation at the annual conference for the British Association for Behavioural and Cognitive Psychotherapies (BABCP) in July 2014, and plans to submit the main research project for conference dissemination are currently being developed.

As described in Appendix II, the SIP findings are being presented to the service involved through team meetings, and potentially at a trust-wide level given the relevance of their implications for a number of services. It is planned that over the next few months I will be feeding back the results of the main research project to the teams and services who were involved with recruitment, and disseminating a results summary to those who participated.

Reflection on Research Procedures

As seems to be common with DClinPsy research projects, the recruitment of participants was a significant difficulty. On reflection there seems to be a number of potential reasons for this, which mainly relate to service-related procedures and circumstances. For example the current context of redesign and restructuring in many regional services meant that it was frequently not possible for services to commit to supporting the research. Partly in relation to this, clinicians in the region seem to have multiple demands on their time, meaning they are unable to support research projects, or unable to prioritise this amongst other responsibilities. Data collection for the SIP was postponed in order to avoid burdening clinicians who were completing ongoing audit work at the time, and the anticipated time period for this required extending due to a limited return of data.

Having completed a placement in the service which later hosted the SIP was helpful, in that I knew many of the clinicians involved. Having these existing relationships in place aided recruitment and the progress of the project more generally, with clinicians showing great willingness to help where possible. For the main project, developing research relationships with regional clinicians needed to start from scratch, and may have delayed recruitment processes. Due to the recency of the Bath doctorate course, there were no existing research relationships with regional services that could be utilised for this project, and it took a long time to explore and develop these, particularly as some of the services have limited involvement in, and experience of, supporting and conducting research.

The most effective recruitment strategy for the main project was for me to attend relevant therapy groups to introduce the study, and invite people to leave their contact details to discuss the study further. This was a significant time commitment given the geography of

the services involved, but once people were able to hear about the study, many expressed an interest in taking part, and I was pleased that people found the project relevant to their experiences. Ideally it would be helpful for services to develop more routine procedures around research participation to facilitate this.

Full ethical approval was sought for both the SIP and main project. The completion and preparation of the relevant forms was time consuming and in some respects overly detailed and repetitive for these type of projects, however once submitted, both REC, R&D, and university ethical approval procedures were generally straightforward. Extending my recruitment sources for the main project meant that further R&D approval was required from two NHS trusts, which again delayed the progress of the project but was otherwise manageable. The requirement for university ethical approval feels somewhat superfluous to national REC approval. Whilst I have found the ethical procedures on the whole to be frustrating and lengthy, the main benefit from my perspective is that the IRAS procedures do foster a detailed and in-depth knowledge of the project as a whole, which can help to clarify and streamline study procedures once the approval is obtained.

Where possible the views and input of people with personal experience (PwPE) of mental health difficulties has been sought and used to guide research processes. For example, the consultation phase of the SIP sought views from PwPE, regarding what questions might be important to explore, and subsequently in reviewing the participant information sheet and other study documents, which was extremely valuable in helping to ensure the research procedures were accessible and hopefully meaningful to those who participated. Beyond this it has been difficult to obtain and incorporate these perspectives in meaningful ways, and through my experiences of the research presented here there are two areas that may contribute to this. Firstly, the design and development of projects occurs necessarily through close conversation between trainee and academic supervisors, and ensures that course requirements around the scope and focus of projects are met. This, coupled with the conceptual contribution to the projects required of the trainee, places restrictions on the feasibility of meaningful involvement of PwPE in designing and planning these research projects. Secondly the meaningful involvement of PwPE in these projects requires effective systems to be in place for accessing and identifying people with appropriate interests, skills, and experiences to the area of study. While this is certainly possible, the resources required may be considerable and as such it has been difficult to undertake given the many other demands involved in the research

process. The development of longer-term links with participation groups and service-user networks may facilitate this in future.

Overall it has been exciting to undertake work with the potential for genuine implications on clinical practice, and having a sense of contributing something new to underresearched areas. Writing for publication can be a complex but enjoyable process, and is always helpful in developing skills around the clarity of communication. For me, the research processes which have been associated with greater stress have been those with more variability and unpredictability, for example developing and using recruitment sources due to the limited ability to plan and ensure progress in these areas. I am pleased it has been generally possible to overcome these difficulties.

Critical Literature Review

In some ways the review was one of the more straightforward pieces of work to complete, mainly due to the absence of primary data collection, and therefore a greater sense of control over how it progressed, and fewer bottlenecks in research procedures that were more common in the other projects. Analysing and synthesising existing data and findings can feel a very different process to conducting original empirical work, and at times it was difficult to strike a balance between clear and accurate reporting of existing literature, whilst at the same time offering interpretation and criticism based on my own perceptions.

The relative recency of hoarding research meant that reviewing this with respect to a particular age group felt timely and potentially a useful contribution to the field. I was not expecting the literature to rely so heavily on descriptive accounts of hoarding presentations and difficulties, which while helpful in understanding the phenomenology, are perhaps more limited in their capacity to develop more detailed understandings of how and why hoarding difficulties arise, progress, and persist. It is hoped this review has been able to point to gaps in current understanding and suggest directions and methodologies for future research that may address these.

Contributions to the Project

This review was designed, developed, and undertaken with advice and supervision from Paul Salkovskis (Academic Supervisor).

Service Improvement Project

Given the frequent discussions that occur in services and emphasis that is placed on outcome measurement, it was surprising to find what is almost an absence of literature exploring client perspectives on this. It seems poor that the experience of filling in these types of questionnaires, and their perceived value in therapy has not been explored, and as such made undertaking the project seem particularly relevant for the service in question, along with a wide range of other services. Similarly the project felt timely given the ongoing discussions in the service around more routine use of measures.

Recruitment for the project proceeded relatively slowly, and should the project be repeated I would consider what additional recruitment avenues might be available, for example contacting all recently discharged clients, or working more closely with administrative staff to incorporate the survey materials into standard discharge procedures. It would be good to replicate the project in other similar services or in a primary care setting where measures are in routine use.

Version B of the survey had been prepared for situations where clients had not completed measures as part of therapy. Due to a lack of responses it was not possible to draw comparisons between the views of people with and without experience of completing measures, though I think this could be an informative study design if appropriate samples could be accessed.

Being able to highlight the need for evidence in this area has felt a meaningful aspect of the study, and I hope that it may start a research process of exploring client perspectives more robustly, rather than relying fully on the many clinician and service level assumptions regarding how measures are perceived.

Contributions to the Project

Ideas and suggestions for the project were provided by various regional clinicians, and service users in the consultation phase. Advice, practical support and supervision were provided by Louise Fountain (Field Supervisor) and Paul Salkovskis (Academic Supervisor). Clinicians working in the service assisted by handing out the survey packs to potential participants. The paper was reviewed from a service perspective by Louise Fountain, Kiran Spence, and Liza Hart.

Main Research Project

Again the surprising lack of literature in this area provided opportunities to explore some of the basic phenomenology and mechanisms associated with self-critical thinking, which felt very relevant given my own and colleagues' clinical experiences with this. As well as the recruitment issues discussed previously, it was particularly hard to manage the significant resource implications of recruiting and data collection in the context of placement and academic commitments.

Given the multiple study components, word counts, and the natural division between the more experimental, overgeneralisation focused work, and the more descriptive phenomenological data, it was decided to divide the write-up into two distinct but related papers. An outline of the secondary paper is presented in Appendix VIII in order to convey the full nature of the project, with analysis of the remaining data planned for summer 2014.

Conducting the experimental sessions with participants was generally very interesting, particularly the interviews around their personal experiences of self-criticism. I was impressed with participants' willingness to share these and to reflect on some of the more abstract issues around this. A few people mentioned how they had found it helpful to consider and clarify their own understanding of how self-critical thoughts operate for them, so I was pleased that participation seemed to be an interesting and positive experience.

It is hoped that this study might promote greater research and clinical attention to self-critical thinking processes, given their relevance across various clinical conditions, and the significant impact on functioning it can cause, as described by some of the participants.

Contributions to the Project

The design and development of the project was achieved in collaboration with Katharine Rimes (Academic Supervisor), who subsequently monitored and supervised the progress of the project along with James Gregory (Academic Supervisor), who also assisted with identifying recruitment sources. Various regional clinicians provided access to potential participants and advice regarding recruitment for the project: Christa Schreiber-Kounine, Alysun Jones, Glyn Lewis, Melanie Chalder, Alison Sedgwick-Taylor, Jan Bagnall, Sam Clark-Stone, Bev Corbett, Mark Bernard, Alison Burrows and Will Devlin. Kate Roberts (undergraduate placement student) assisted with data collection and entry for the majority of the control group participants, with Phan Nguyen (undergraduate placement student) also assisting with data collection.

Case Studies

With the case studies I have aimed to explore particular processes, techniques, or psychological issues that seemed pertinent to clinical work with the client in question. Preparing and writing these has been a helpful way to engage with the literature whilst on placement, and explore the much-discussed 'theory-practice links', a term with face-validity but that is surprisingly hard to define and implement in other contexts.

Practicalities on placement, and the process of selecting a suitable client and obtaining consent meant that it was commonly the case that the writing of these case studies occurred following the majority of clinical work with the client. This has felt difficult at times in that the process of researching and writing the case study can help to raise clinical questions or clarify thinking around formulations and interventions, all of which may be helpful to guide the clinical work but may be too late to implement with the client. Producing the case study concurrently with the clinical work seems an ideal solution, but may prove an inefficient use of time should the client stop attending.

Overall it is hoped that as a set, the case studies highlight the many interesting issues and themes arising from my clinical work across the different placements, raising questions and potential new research directions; something that for me feels one of the main strengths of single case work.

Contributions to the Project

These reports were produced with supervision from the relevant supervisor for each placement: Mark Turner, Jo Keightley, Lisa Fensome, Linda Walz, and Nadja Krohnert. They were reviewed by various members of the Programme team, and comments incorporated.

Further Plans

There are various natural extensions and developments of the research presented here that are likely to be informative, for example exploring habitual self-critical thinking in people with remitted depression to investigate questions around the development of these habits, and their response to treatment. With the SIP, it would be interesting to replicate the study in a primary care setting, and perhaps to incorporate other methodologies, for example interviews, into this work.

I would be keen to pursue these, and other, research questions in the near future, and in broader terms to maintain research activity post-qualification. My experiences through training have highlighted a number of potential difficulties and barriers to this, for example the time limitations within typical clinical posts that make research hard to implement alongside other duties, and difficulties in protecting time for this work within overall job roles. I plan to investigate further what roles might more feasibly permit research time, and how links with academic institutions may facilitate this.

Another potential barrier is the need to develop and maintain research teams and networks. Despite strong support and supervision systems, the many research components and the complexity of these have at times been very difficult to monitor and manage effectively in the context of the other demands of clinical training. This has emphasised for me the need for strong team working and collaboration when undertaking similar projects in future, so it will be important to explore methods and career options that permit this.

Despite these potential barriers, conducting this research has emphasised for me the value and potential widespread impact of accessible and clinically relevant research, with clearly outlined implications for practice and good dissemination. The clinician-researcher seems ideally placed to undertake this work, which to me seems a key strength of the clinical psychologist role.

Appendix I - Critical Literature Review: Guidance for Authors, Journal of Obsessive Compulsive and Related Disorders



JOURNAL OF OBSESSIVE-COMPULSIVE AND RELATED DISORDERS

AUTHOR INFORMATION PACK

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DESCRIPTION

Journal of Obsessive-Compulsive and Related Disorders (JOCRD) is an international journal that publishes high quality research and clinically-oriented articles dealing with all aspects of **obsessive-compulsive disorder** (OCD) and related conditions (**OC spectrum disorders**; e.g., **trichotillomania**, **hoarding**, **body dysmorphic disorder**). The journal invites studies of clinical and non-clinical (i.e., student) samples of all age groups from the fields of psychiatry, psychology, neuroscience, and other medical and health sciences. The journal's broad focus encompasses **classification**, **assessment**, **psychological** and **psychiatric treatment**, **prevention**, **psychopathology**, **neurobiology** and **genetics**. Clinical reports (descriptions of innovative treatment methods) and book reviews on all aspects of OCD-related disorders will be considered, as will theoretical and review articles that make valuable contributions.

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Appendix II - Service Improvement Project: Service Responses to Findings and Recommendations

As part of the service improvement focus of this project, the final paper was circulated to three representatives of the service involved. These representatives included both clinicians and managers within the service, who were asked to provide comments on the paper considering the following:

- Clarity of the report and presentation of information
- Responses to the study findings, interpretations, and recommendations made
- Any actions that may arise as a result of the report, including further dissemination, research, or service evaluation, and any possible developments to service-level practices or individual clinical practice

Comments received

To obtain a management and service-level perspective on the study, the paper was sent to the Area Head of Psychological Therapies for review. She agreed with the comments made regarding implications for services, noting the following:

“I think it will be helpful for us to think more carefully and systematically about the measures we use and very importantly about the way we use them, it's certainly making me think already. There are potentially some training issues and we would also need to consider use, or not, by non psychological therapists.”

Regarding further dissemination, she suggested presenting the work at the service's monthly county-wide team meeting, with wider circulation if possible:

“It would be good to disseminate a summary at least trust wide too as it has implications for most services.”

Two clinicians working in the service also reviewed the paper, and made the following comments:

“If we are asking service users to complete questions, the purpose of them should be clearly explained. The option of completing them in session would be of benefit, given that it raised discomfort.”

“We need to routinely build in providing feedback on questionnaires completed. This made me more aware that we ask service users to complete a number of questionnaires as part of a DBT assessment and need to improve providing feedback. We do routinely send out a pack of questionnaires to complete as part of the assessment process and we need to get better on providing feedback of these measures. I'm aware that this is done with those who are offered DBT and repeated over time. However we are not good at doing this with those that are not offered DBT, perhaps due to constraints of time. I will be more mindful of the pressure service users can experience to change. This I will take to the wider DBT consultation to discuss and action, when you disseminate your findings.”

“The service user's feedback that they presented change when it hadn't occurred raised the point that the results should be discussed and we need to be mindful that there is the possibility that they may not reflect accurate change. The pressure to present change due to concerns regarding commissioning, was concerning.”

“My overall impression is that it [the paper] is very interesting, clear and informative. I think there is some concern overall that questionnaires are given out, completed and then put away in a drawer and never looked at again – I think the service could be doing a lot more to analyse the data and use it to improve and develop services.”

Appendix III - Service Improvement Project: Clinician Survey

Questions for Clinicians about the use of Measures in Therapy

Please complete the following questions:

1. Roughly speaking, with what percentage of your clients do you use questionnaire measures? (Please place a cross on the line).

0 10 20 30 40 50 60 70 80 90 100

2. Which measures, if any, do you tend to use? (Please write below – a list of example measures is provided at the end of these questions).

.....

.....

.....

.....

.....

3. Below are some reasons why clinicians may or may not choose to use measures as part of their work. Please indicate how strongly each statement applies to you:

| | Does not apply to me | Somewhat applies to me | Strongly applies to me | Completely applies to me |
|---|-------------------------|------------------------------|------------------------------|--------------------------------|
| I am unable to access appropriate measures | 0 | 1 | 2 | 3 |
| My clients find them helpful | 0 | 1 | 2 | 3 |
| Measures are not relevant to my style of working | 0 | 1 | 2 | 3 |
| I don't know how to administer/score the measures | 0 | 1 | 2 | 3 |
| Measures help ensure I am working effectively | 0 | 1 | 2 | 3 |
| Measures may damage the therapeutic relationship | 0 | 1 | 2 | 3 |
| They allow my clients to track their progress in therapy | 0 | 1 | 2 | 3 |
| Measures can make my clients feel understood | 0 | 1 | 2 | 3 |
| My clients do not find them to be a helpful aspect of therapy | 0 | 1 | 2 | 3 |
| I am required to use measures by the team I work in but would not choose to otherwise | 0 | 1 | 2 | 3 |
| Using measures was not part of my professional training | 0 | 1 | 2 | 3 |
| My clients find them reassuring | 0 | 1 | 2 | 3 |

| | | | | |
|---|---|---|---|---|
| Measures may mislead me in terms of my client's progress | 0 | 1 | 2 | 3 |
| I believe measures are cold and impersonal | 0 | 1 | 2 | 3 |
| Measures help with assessment and diagnosis | 0 | 1 | 2 | 3 |
| Measures do not add anything beyond what I can find out through questioning | 0 | 1 | 2 | 3 |

Thank you for completing these questions. Please provide the following details:

Name:.....

Job Title:

Example Measures – for reference

- Mood-based (e.g. Beck Depression Inventory, Beck Anxiety Inventory, Hospital Anxiety and Depression Scale, Beck Hopelessness Scale, PHQ-9, GAD-7)
- Symptom-based (e.g. Obsessive-Compulsive Inventory, Impact of Events Scale, Social Anxiety Rating Scale, Eating Disorder Scale)
- Diagnostic scales (e.g. Structured Clinical Interview for Diagnosis, Clinician-administered PTSD scale)
- Process-based (e.g. Outcome Rating Scale, Session Rating Scale)
- Generalised scales (e.g. CORE Outcome Measure, Quality of Life scales)

Appendix IV - Service Improvement Project: Service User Survey (Versions A and B)

Survey on the use of Questionnaires in Therapy

A

This is survey A. If your therapist has asked you to fill in questionnaires as part of your current therapy, please complete this survey. If not, please complete survey B instead. If you are unsure about what sort of questionnaires we mean, please read the paragraph below, or you can ask your therapist.

Therapists sometimes use questionnaires during therapy to try to find out more about the difficulties people are experiencing and how these change over time. For example, these questionnaires may ask about our mood over the past week, whether we are experiencing particular symptoms, or how much we agree with particular beliefs or statements. We would like to know about your experiences of this during your sessions. Please answer the following questions:

1. These questions are about how questionnaires have been used with your current therapist. **For each question, please circle one answer:**

| | | | | |
|---|-------------------------|----------------------------|--------------------------------|--------------------------|
| A. How often have you completed questionnaires as part of therapy? | Once | Every few sessions | Every session | |
| B. Where did you complete them? | In the session | In the waiting room | At home | |
| C. Roughly how long did each one take to complete? | Less than 5 minutes | 5-10 minutes | 11-20 minutes | More than 20 minutes |
| D. How well were the reasons for using questionnaires explained to you? | They were not explained | They were explained poorly | They were explained reasonably | They were explained well |
| E. How well was it explained what you needed to do to fill them in? | This was not explained | This was explained poorly | This was explained reasonably | This was explained well |
| F. How well were your responses discussed with you? | They were not discussed | They were discussed poorly | They were discussed reasonably | They were discussed well |

| | | | | |
|--|--|----------------------------|--------------------------------|--------------------------|
| G. Did you complete the same questionnaires across different sessions? | No | Yes | | |
| H. How well were changes in your responses over time discussed with you? | They were not discussed/ Not applicable | They were discussed poorly | They were discussed reasonably | They were discussed well |

If you have any comments about the questions on the previous page, please write them here:

2. These questions are about how the questionnaires made you feel when you were completing them. **For each feeling, please circle one number:**

| | NOT AT ALL | | | | | | | | EXTREMELY | |
|-----------------------|------------|---|---|---|---|---|---|---|-----------|----|
| Irritated | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Confused | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Hopeful | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Down/depressed | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Interested | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Exhausted | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Anxious | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

3. These questions are about your experiences of using questionnaires.

For each question, please circle one number.

| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
|--|----|----|---|--|----|----|
| The questionnaires led to unhelpful discussions with my therapist | | | | The questionnaires led to helpful discussions with my therapist | | |
| Completing questionnaires made me think more negatively about my problems | | | | Completing questionnaires made me think more positively about my problems | | |
| The questionnaires made my difficulties seem less normal | | | | The questionnaires made my difficulties seem more normal | | |
| The questionnaires I was given seemed irrelevant to me | | | | The questionnaires I was given seemed relevant to me | | |
| The questionnaires made me feel less confident in my therapist | | | | The questionnaires made me feel more confident in my therapist | | |
| Completing questionnaires did not help me track my progress in therapy | | | | Completing questionnaires helped me track my progress in therapy | | |
| Completing questionnaires made it harder to tell my therapist difficult things | | | | Completing questionnaires made it easier to tell my therapist difficult things | | |

continued on next page

| | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
|--|----|----|----|---|----|----|----|--|
| The questionnaires did not highlight anything new for me | | | | | | | | The questionnaires highlighted new things I had not previously thought about |

4. Overall, how well do you feel your therapist understands you and your difficulties?

Please circle one number:

| -5 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | +5 |
|------------------|----|----|----|----|---|----|----|----|----|----------------|
| Extremely poorly | | | | | | | | | | Extremely well |

5. Overall, how helpful have you found questionnaires to be as part of your therapy?

Please circle one number:

| -5 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | +5 |
|---------------------|----|----|----|----|---|----|----|----|----|-------------------|
| Extremely unhelpful | | | | | | | | | | Extremely helpful |

6. Thinking in general, what is your feeling towards questionnaires being routinely used as part of therapy?

Please circle one number:

| -5 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | +5 |
|--------------------|----|----|----|----|---|----|----|----|----|---------------------|
| Extremely bad idea | | | | | | | | | | Extremely good idea |

7. Do you have any suggestions that might improve how helpful questionnaires are in therapy?

8. To help with our analysis, we would be grateful if you could provide the following brief information about yourself:

Your gender:.....

Your age:.....

The number of therapy sessions you have had so far:.....

Are your sessions done in a group, or individually? GROUP/INDIVIDUALLY (please circle)

9. If you wish to make any other comments about this topic, please do so here:

Thank you for your participation in this research project. Please return this survey to us using the freepost envelope provided, or by handing it back to your therapist.

Survey on the use of Questionnaires in Therapy

B

This is survey B. If you have not filled in questionnaires as part of your current therapy, please complete this survey. If you have, please complete survey A instead. If you are unsure about what sort of questionnaires we mean, please read the paragraph below, or you can ask your therapist.

Therapists sometimes use questionnaires during therapy to try to find out more about the difficulties people are experiencing and how these change over time. For example, these questionnaires may ask about our mood over the past week, whether we are experiencing particular symptoms, or how much we agree with particular beliefs or statements. We would like to know your thoughts about this. Please answer the following questions:

1. Did you expect to be asked to fill in questionnaires as part of therapy?

Please circle one answer:

No

Yes

2. These questions are about your opinions on using questionnaires.

For each question, please circle one number.

| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
|--|----|----|---|--|----|----|
| Completing questionnaires is likely to lead to unhelpful discussions with my therapist | | | | Completing questionnaires is likely to lead to helpful discussions with my therapist | | |
| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Completing questionnaires is likely to make me think more negatively about my problems | | | | Completing questionnaires is likely to make me think more positively about my problems | | |
| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Completing questionnaires is likely to make my difficulties seem less normal | | | | Completing questionnaires is likely to make my difficulties seem more normal | | |


| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
|---|----|----|---|--|----|----|
| Completing questionnaires is likely to make me feel less confident in my therapist | | | | Completing questionnaires is likely to make me feel more confident in my therapist | | |
| Completing questionnaires is not likely to help me track my progress in therapy | | | | Completing questionnaires is likely to help me track my progress in therapy | | |
| Completing questionnaires is likely to make it harder to tell my therapist difficult things | | | | Completing questionnaires is likely to make it easier to tell my therapist difficult things | | |
| Completing questionnaires is unlikely to highlight anything new for me | | | | Completing questionnaires is likely to highlight new things I had not previously thought about | | |
| <p>If you have any comments about the above, please write them here:</p> | | | | | | |

Please circle one number:

4. Overall, how helpful do you think questionnaires would be if they were used as part of your therapy?

5. Thinking in general, what is your feeling towards questionnaires being routinely used as part of therapy?

| | | | | | | | | | | |
|--------------------|----|----|----|----|---|----|----|----|---------------------|----|
| -5 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | +5 |
| Extremely bad idea | | | | | | | | | Extremely good idea | |



7. To help with our analysis, we would be grateful if you could provide the following brief information about yourself:

Your gender:.....

Your age:.....

The number of therapy sessions you have had so far:.....

Are your sessions done in a group, or individually? GROUP/INDIVIDUALLY (please circle)

8. If you wish to make any other comments about this topic, please do so here:

Thank you for your participation in this research project. Please return this survey to us using the freepost envelope provided, or by handing it back to your therapist.

Appendix V - Service Improvement Project: REC Favourable Ethical Opinion Letter



Health Research Authority

NRES Committee South Central - Berkshire B
Bristol REC Centre
Whitefriars
Level 3, Block B Lewins Mead
Bristol
BS1 2NT

Telephone: 0117 342 1335
Facsimile: 0117 342 0445

05 September 2012

Mr Graham Thew
Trainee Clinical Psychologist
Department of Clinical Psychology
University of Bath
Claverton Down, Bath
BA2 7AY

Dear Mr Thew

Study title: Assessing clients' experiences of measures in psychological therapy.
REC reference: 12/SC/0517

The Proportionate Review Sub-committee of the NRES Committee South Central - Berkshire B reviewed the above application on 04 September 2012.

Ethical opinion

On behalf of the Committee, the sub-committee gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.

Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at <http://www.rdforum.nhs.uk>.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of approvals from host organisations.

ADDITIONAL CONDITIONS SPECIFIED BY THE REC:

In the participant information sheet:

On page 1, first paragraph, last sentence, the words: "and to make it as helpful as possible to the people that use this service", could be deleted as it makes more sense without this.

On page 2, under the paragraph entitled "What will happen to my responses?" it does not mention that any comments/responses given in the questionnaires may be published in the final report. Whilst this is included on the consent form, it should be mentioned in the information sheet before being included in the consent form.

The consent form should quote the date and version number of the participant information sheet.

Copies of the corrected documents should be lodged with the Ethics Office.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

You should notify the REC in writing once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers. Confirmation should also be provided to host organisations together with relevant documentation.

Approved documents

The documents reviewed and approved were:

| <i>Document</i> | <i>Version</i> | <i>Date</i> |
|---------------------------------------|----------------|----------------|
| Covering Letter | | 24 August 2012 |
| Investigator CV | | 01 May 2012 |
| Letter from Sponsor | | 17 August 2012 |
| Letter of invitation to participant | 3 | 21 April 2012 |
| Other: CV - Paul Salkovkis | | |
| Other: CV - Louise Fountain | | |
| Other: Letter for Clinicians | 2 | 22 June 2012 |
| Other: Brief Questions for clinicians | 2 | 22 June 2012 |
| Participant Consent Form *** | 1 | 06 May 2012 |
| Participant Information Sheet *** | 3 | 21 April 2012 |

***See above

Membership of the Proportionate Review Sub-Committee

The members of the Sub-Committee who took part in the review are listed on the attached sheet.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document “After ethical review – guidance for researchers” gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

Further information is available at National Research Ethics Service website > After Review

12/SC/0517

Please quote this number on all correspondence

With the Committee's best wishes for the success of this project

Yours sincerely



pp. Dr John Sheridan
Chair

Email: ubh-tr.BerkshireB@nhs.net

Enclosures: "After ethical review – guidance for researchers"]
Copy to: Prof. Paul Salkovskis

Charlotte Hook, AWP NHS Partnership

.....

NRES Committee South Central - Berkshire B

Attendance at PRS Sub-Committee of the REC meeting on 04 September 2012

Committee Members:

| <i>Name</i> | <i>Profession</i> | <i>Present</i> | <i>Notes</i> |
|--------------------------|-------------------------------------|----------------|--------------|
| Mr Michael Arnott | Consultant Research Services | Yes | |
| Dr John Sheridan | Consultant Toxicologist and Chemist | Yes | |
| Miss Louise Anne Stainer | Biomedical Scientist | Yes | |

Also in attendance:

| <i>Name</i> | <i>Position (or reason for attending)</i> |
|---------------------|---|
| Mrs Naazneen Nathoo | Committee Coordinator |

Appendix VI - Service Improvement Project: Guidance for Authors, The Cognitive Behaviour Therapist

CAMBRIDGE | Instructions for Contributors

the Cognitive Behaviour Therapist

Editor:

Pamela Myles

Director of Training, Charlie Waller Institute of Evidence-Based Psychological Treatment,
University of Reading

Associate Editors:

Vicki Curry, Islington Adolescent Outreach Team

Nick Grey, Centre for Anxiety Disorders and Trauma, Maudsley Hospital, London

Nick Hawkes, Barnet, Enfield and Haringey Mental Health NHS Trust

Claire Lomax, Department of Psychology, University of Bath

Mark Papworth, University of Newcastle

Faramarz Hashempour, University of Bangor

Rachel Handley, University of Exeter

Natalie Taylor-Kerr, Isle of Man

Peter Langdon, University of East Anglia

Aims and Scope

the Cognitive Behaviour Therapist is an interdisciplinary peer reviewed journal aimed primarily at cognitive and behavioural practitioners in the helping and teaching professions. Published online, the journal features articles covering clinical and professional issues, which contribute to the theory, practice and evolution of the cognitive and behavioural therapies. The journal will publish papers that describe new developments; articles that are practice focussed and detail clinical interventions, research reports concerning the practice of cognitive behaviour therapy, detailed case reports, audits that are relevant to practice, and reviews of clinical scales and other assessment methods. The journal will also publish articles that have an education, training or supervision focus. It will also include reviews of recently published literature that is directly relevant to practitioners. A particular feature of the journal is that its electronic nature is designed to ensure timeliness of publication and professional debate whilst also ensuring rigorous standards in the dissemination of high quality materials with relevance to the practice of the

cognitive and behaviour therapies.

Editorial Governance

the Cognitive Behaviour Therapist encompasses most areas of human behaviour and experience, and represents many different research methods, from quantitative to qualitative research, how to do clinical interventions to detailed case studies.

Under the guidance of its editorial board *the Cognitive Behaviour Therapist* aims to reflect and influence the continuing changes in the concepts, methodology, and techniques within the cognitive and behaviour therapies.

BABCP

the Cognitive Behaviour Therapist is published for the British Association for Behavioural and Cognitive Psychotherapies and is the sister Journal to *Behavioural and Cognitive Psychotherapy*.

Editorial Statement – scope of journal content

The Editors welcome authoritative contributions from people working, or otherwise involved, in the practice, research, education, training and supervision in the cognitive and behaviour therapies. Articles must be original and focused upon cognitive and/or behaviour therapy. All articles must include a set of 3-5 learning objectives that will be achieved through reading the paper. At the end of each paper a summary of the main points from the paper must be included with suggestions for follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal. There is no formal word limit but concision is recommended.

The journal also welcomes additional or standalone multimedia materials that support, enhance or illustrate specific aspects of CBT or Education the submitted papers such as video or audio, power point presentations or transcripts of therapy sessions.

Practice Articles

The practice of the cognitive and behaviour therapies is based upon empirically grounded interventions. This section will explore this area by the publication of articles that describe cognitive and behavioural interventions and the research evidence that underpins them or innovative interventions based on cognitive behavioural models. For new areas of application of CBT, articles providing an overview of CBT treatment issues could be considered, whereas in well-established areas, a more detailed approach to one or two specific aspects of therapy may be appropriate. All articles must include a set of 3-5 learning objectives that will be achieved through reading the paper. At the end of each paper a summary of the main points from the paper must be

included with suggestions for follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal.

Reviews

Reviews of historical, contemporary, or innovative approaches to practice are also sought providing that they demonstrate relevance to the practice of the current of the cognitive and behavioural psychotherapies. Prospective authors for review papers should initially discuss their proposals with one of the editors.

Case Studies

Dissemination of effective practice will be promoted through the publication of case studies that involve cognitive and behavioural psychotherapy with individuals, couples, groups and families. A suggested template is provided which is designed to ensure sufficient information is provided to allow other therapists to replicate successful therapy. All articles must include 3-5 learning objectives that will be achieved through reading the article. At the end of each paper a summary of the main points should be included with suggestions for follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal. The case study should contribute to the development of theory or clinical practice, and feed into CBT practice as a whole rather than just relating to the specific case.

Authors may find the following guidelines for structure helpful:

- Abstract
- Learning objectives (3-5)
- Introduction: including an outline of theoretical research and clinical literature relevant to the case
- Presenting problem: including information on the presenting problem and associated goals of treatment, diagnosis, relevant history and development of problems, scores on standard and idiographic measures, relevant history
- Conceptualisation: including a relevant theory-based CBT model used as a framework for formulation.
- Course of therapy: including methods used linked to theory and assessment of progress; difficulties encountered and any innovations in therapy
- Outcome: including clinical change, progress towards goals, change to measures, plans for follow-up
- Discussion: including relating to theory and evidence-base as well as reflections on own practice; implications for therapy and recommendations for other clinicians

- Summary: main points of the paper including suggestions for follow-up reading

Original Research

Research evidence is at the heart of the practice of the cognitive and behavioural psychotherapists. Original research will be published that is about and is directly relevant to the practice of the cognitive and behaviour therapies, such as the therapeutic relationship, therapeutic process and the evaluation of therapeutic strategies and techniques. It is expected that such reports meet both the necessary standards of scientific rigour and the journal's requirement of clear implications for the practice of the cognitive and behavioural therapies. Consequently, the description of the research and the presentation of results should be sufficiently brief to enable sufficient discussion of the practice implications. Consideration will be given to quantitative, qualitative and mixed approaches given appropriate fit between the question, methodology and methods of research chosen. All articles must include a set of 3-5 learning objectives that will be achieved through reading the paper. At the end of each paper a summary of the main points from the paper must be included with suggestions for follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal.

Education and Supervision

The dissemination of effective cognitive and behaviour therapy through evidence based education and supervision strategies is important to ensure that service users receive proficient therapy and therapists remain up to date. This section will explore educational models, evaluations of innovative education strategies and approaches to the supervision of practice within the cognitive and behavioural psychotherapies. All articles must include a set of 3-5 learning objectives that will be achieved through reading the paper. At the end of each paper a summary of the main points from the paper must be included with suggestions for follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal.

Service Models and Forms of Delivery

The service model is the framework that exists to support the therapist with the delivery of either cognitive and behaviour therapies and services. This section will explore all aspects of the theory and application of service models and the delivery of therapy. Successes and failures have equal part to play in examining the practical application and the role of evidence within the provision of effective cognitive and behavioural interventions within a service context. Papers are invited which explore the structure of teams, processes adopted, the methods and designs involved. Papers that examine the outcomes of audits and their recommendations will also be considered. All articles must include a set of 3-5 learning objectives that will be achieved through reading the paper. At the

end of each paper a summary of the main points from the paper must be included with suggestions for follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal.

Reviews of Assessment Tools and Methods

Reviews of clinical scales and other assessment methods will also be considered. These reviews should provide the practitioner with a review of a scale's or other tool's purpose and properties, sufficient information to know how and when to use it, and how to interpret the results and make use of them. All articles must include a set of 3-5 learning objectives that will be achieved through reading the paper. At the end of each paper a summary of the main points from the paper must be included with suggestions for follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal.

Submission of a manuscript

Papers should be submitted online at <http://mc.manuscriptcentral.com/cbt>

Style Guide

- Title page. The title should phrase concisely the major issues. Author(s) to be given with departmental affiliations and addresses, grouped appropriately. A running head of no more than 40 characters should be indicated.
- Abstract. The abstract should include up to six key words that could be used to describe the article. This should summarize the article in no more than 250 words, references should not to be included in the abstract.
- All articles must include a set of 3-5 learning objectives that will be achieved through reading the paper. At the end of each paper a summary of the main points from the paper must be included with suggestions for follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal.
- Text. This should begin with an introduction, succinctly introducing the point of the paper to those interested in the general area of the journal. Attention should be paid to the Editorial Statement. References within the text should be given in the form of (Jones & Smith, 1973). When there are three or more authors the first citation should be given as Williams et al. (1973). The appropriate positions of tables and figures should be indicated in the text. Footnotes should be avoided where possible.
- References should be in the APA style. All citations in the text should be listed in strict alphabetical order according to surnames. Multiple references to the same author should be

listed using a, b, etc., for entries within the same year. Note: Authors are encouraged to include digital object identifiers (dois) in their citation listings, as follows:

Kaltenthaler, E., Parry, G. and Beverley, C. (2004). Computerised cognitive behaviour therapy: a systematic review. *Behavioural and Cognitive Psychotherapy*, 32, 31–55.

doi:10.1017/S135246580400102X.

- Declaration of interests should be included with all papers, if there are none this should be stated.
- Acknowledgements. May include previous unpublished presentations (e.g. dissertation, meeting paper), financial support, scholarly or technical assistance etc.
- Tables. Tables should be numbered and given explanatory titles.
- Figures:

Preferred formats

- tif
- eps
- jpeg (acceptable for photographs / halftones)

Figure captions. Numbered captions should be typed on a separate page

Please note that jpegs may not print well due to the compression process used which discards some data in the image. If you need to incorporate any text labels as part of the halftone then these will print jagged if the file is saved as a jpeg. Ideally you should import the halftone into illustration software for labeling and then save the file as an eps file. Gif formats are mainly suitable for online reproduction, and resolution is generally too low for print reproduction (only an issue when the article PDF is printed by a reader).

Resolution

All files must be a minimum of 300 dpi (dots per inch) for halftones, 600 dpi for combination figures and 1200 dpi for line art (black and white).

Colour

Colour files must be supplied as CMYK (not RGB) at a minimum resolution of 300 dpi. If an image is for a cover we may require a higher resolution. Note that the image size must be no smaller than the size at which it will appear in the journal.

Please do not submit your figures embedded into Word documents as the quality will be severely degraded.

If you require any further guidance on creating suitable electronic figures, please visit http://dx.sheridan.com/guidelines/digital_art.html. Here you will find extensive guidelines on

preparing electronic figures and also have access to an online preflighting tool where you can check if your figures are suitable for reproduction.

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Appendix VII - Main Research Project: T-test comparisons of participants in eating disorder group with and without comorbid depression on questionnaire measures, and VAS ratings before and after experimental tasks.

| | Eating Disorder without Depression (n=14) | | Eating Disorder with Depression (n=12) | | Test statistic |
|---|---|-------|--|-------|----------------------------|
| | Mean | SD | Mean | SD | |
| Questionnaire Measures | | | | | |
| MPS Neg | 70.07 | 21.77 | 65.58 | 19.06 | $t(24) = .6, p = .584$ |
| HINT | 4.13 | 0.49 | 4.46 | 0.45 | $t(24) = -1.7, p = .097$ |
| CES-D | 26.71 | 9.96 | 35.42 | 8.80 | $t(24) = -2.3, p = .028$ |
| EDE-Q | 3.97 | 1.19 | 4.48 | 0.58 | $t(19.4) = -1.4, p = .168$ |
| VAS Self-criticism | | | | | |
| Time A | 52.79 | 31.58 | 63.58 | 15.77 | $t(19.7) = -1.1, p = .274$ |
| Time B | 76.89 | 21.00 | 81.88 | 25.95 | $t(24) = -.5, p = .593$ |
| Change Time A to Time B | 24.10 | 21.77 | 18.30 | 26.80 | $t(24) = .6, p = .547$ |
| VAS Body/appearance-related self-criticism | | | | | |
| Time C | 38.86 | 31.87 | 50.92 | 26.24 | $t(24) = -1.0, p = .308$ |
| Time D | 52.54 | 34.28 | 75.25 | 16.79 | $t(19.5) = -2.2, p = .041$ |
| Change Time C to Time D | 13.68 | 20.48 | 24.33 | 21.70 | $t(24) = -1.3, p = .211$ |
| VAS Low Mood | | | | | |
| Time A | 41.68 | 21.16 | 65.08 | 16.63 | $t(24) = -3.1, p = .005$ |
| Time B | 61.07 | 20.83 | 71.54 | 20.07 | $t(24) = -1.3, p = .206$ |
| Change Time A to Time B | 19.39 | 27.18 | 6.46 | 14.42 | $t(24) = 1.5, p = .153$ |
| VAS Global negative self-views | | | | | |
| Time A | 45.77 | 17.85 | 60.58 | 10.96 | $t(24) = -2.5, p = .020$ |
| Time B | 62.71 | 20.86 | 75.88 | 14.55 | $t(24) = -1.8, p = .079$ |
| Change (Time A to Time B)* | 5.83 | 1.46 | 5.81 | 0.77 | $t(24) = .04, p = .968$ |

*Table 1. Means, standard deviations, and independent samples t-test results comparing participants in the eating disorder group with (n=12) and without (n=14) comorbid depression, on the main study variables. (MPS Neg= Negative Perfectionism subscale of Multidimensional Perfectionism Scale; HINT= Habit Index of Negative Thinking; CES-D= Centre for Epidemiological Studies Depression Scale; EDE-Q= Global scale of Eating Disorder Examination Questionnaire). Time A = baseline, Time B = post hard word puzzles, Time C = post easy word puzzles, and Time D = post body image task. All VAS scores were rated 0-100. *Note that Change in Global negative self-views (Time A to Time B) uses transformed data (see Method).*

Appendix VIII - Main Research Project: Outline of Secondary Paper

Self-critical thinking: phenomenology, lived experience, and relationship to other constructs

Summary

Alongside the Main Research Project paper presented earlier, data were collected to form a secondary paper examining the experience and phenomenology of self-critical thinking, and its relationship to other psychological constructs. The outline of this paper and partial results are presented here.

Aims and Objectives

This study aims to understand the phenomenology of self-critical thinking, how it relates to other related constructs such as self-esteem, and participants' experiences of this cognitive process. The three participant groups are included: people currently experiencing depression, people currently experiencing an eating disorder, and healthy controls with no history of mental health difficulties. The use of these groups will permit the investigation of clinical versus nonclinical differences in self-critical thinking, alongside exploring both disorder-specific and transdiagnostic aspects through comparison of the two clinical groups.

Hypotheses

- Self-critical thinking will show moderate to high correlations with negative perfectionism, rumination, lower self-compassion, low self-esteem and mood. Exploratory analysis will be undertaken to investigate if self-criticism predicts mood over and above these variables.
- Thematic analysis of self-critical content will show themes common to both clinical conditions, as well as unique themes. For example it is predicted that the participants with eating disorders will report higher levels of self-critical thoughts about their eating, weight and shape than the other two groups. However both groups are predicted to report self-critical thoughts about achievement and performance.

Method

Participants completed the following questionnaires assessing a range of psychological constructs:

Self-criticism:

- Habit Index of Negative Thinking (HINT; Verplanken, Friborg, Wang, Trafimow, & Woolf, 2007). A measure of habitual self-critical thinking, the HINT has good psychometric properties (Verplanken et al., 2007) and internal consistency; Cronbach's alpha in this study was 0.97.
- Forms of Self-Criticizing/attacking and reassurance scale (FSCRS) and Functions of Self-Criticizing/attacking scale (FSCS) (Gilbert, Clarke, Hempel, Miles, & Irons, 2004). The FSCRS contains subscales of 'Inadequate self', 'Hated self', and 'Reassured self' and was scored according to Kupeli, Chilcot, Schmidt, Campbell, and Troop (2013). The FSCS contains subscales of self-correction and self-persecution. Cronbach's alpha coefficients were 0.95 and 0.94 respectively.

Perfectionism:

- Frost Multidimensional Perfectionism Scale (MPS; Frost, Marten, Lahart, & Rosenblate, 1990). Analyses used the MPS Negative Perfectionism subscale, which is computed as the total of the following subscales: Concern over Mistakes, Doubting of Actions, Parental Expectations, and Parental Criticism (see Frost, Heimberg, Holt, Mattia, & Neubauer, 1993). Cronbach's alpha in this study was 0.94.

Depression symptoms:

- Centre for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). The CES-D is a widely used and validated brief measure of depression symptoms (see Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977). Cronbach's alpha in this study was 0.93.

Eating Disorder symptoms:

- Eating Disorder Examination Questionnaire (EDE-Q; Fairburn & Beglin, 2008). A general measure of self-reported eating disorder symptoms, the present study used the global scale of the EDE-Q, which averages the four subscales of Restraint, Eating Concern, Weight Concern, and Shape Concern. Cronbach's alpha was 0.96.

Self-esteem:

- Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1986). A widely-used measure of global self-esteem, with good psychometric properties (see Gray-Little, Williams, & Hancock, 1997). Cronbach's alpha in this study was 0.90.

Rumination:

- Rumination-Reflection Questionnaire (RRQ; Trapnell & Campbell, 1999). The rumination items were used (see Trapnell & Campbell, 1999) as a global indicator of ruminative thought; Cronbach's alpha in this study was 0.92.

Self-compassion:

- Self-compassion scale Short Form (SCS; Raes, Pommier, Neff, & Van Gucht, 2011). A brief scale producing a global measure of self-compassion, Cronbach's alpha in the current study was 0.89.

Functioning with respect to self-critical thinking:

- Work and Social Adjustment Scale (WSAS; Mundt, Marks, Shear, & Greist, 2002). The WSAS examines the functional impact of a particular problem defined by the researcher; self-critical thinking was therefore used in the current study and Cronbach's alpha was 0.91.

Questionnaire responses were analysed using a single sample design to explore correlational relationships between the measures.

An audio-recorded semi-structured interview was used to explore people's experiences of self-critical thinking. The interview questions addressed the content, topics, frequency, duration, triggers, impact, and development of self-critical thinking, along with obtaining participants' views on whether it can be controlled, and whether they would wish to change any aspects of it. The interview protocol is provided at the end of this appendix.

In addition to the interview, participants completed a brief questionnaire about the content of their self-critical thoughts in the past week (also provided at the end of this appendix), and were asked to provide some Likert scale ratings of the amount of perceived control they have over self-critical thinking, the desire to make changes to their self-critical thinking, and level of agreement with the following statements:

- Self-critical thinking has benefits for me
- Self-critical thinking has disadvantages for me
- I would like to reduce my self-criticism
- Being self-critical is part of my personality

- My self-criticism is a learnt habit that could be unlearned
- It would be difficult to reduce my self-criticism
- I would be interested in advice about how to reduce my self-criticism

Controllability was assessed using the question “On a scale from 0 to 10 where 0 is not at all controllable and 10 being totally controllable, how would you view self-critical thinking?”, while changes to self-critical thinking used the question “Would you like to change anything about your self-critical thinking?”, and used a 0-10 scale where 0 is ‘I wouldn’t change anything’ and 10 ‘I want to change everything about my self-critical thinking’.

The remaining statements were all rated on a 1-7 Likert scale, with labels of ‘totally agree’, ‘agree very much’, ‘agree slightly’, ‘neutral’, ‘disagree slightly’, ‘disagree very much’, and ‘totally disagree’, respectively.

Thematic analysis will be undertaken using a three-group cross-sectional design to explore descriptive similarities and differences between groups. A sample of data will be analysed by a second rater to ensure reliability. The relationships between themes arising from the data, and the questionnaire and rating scale data will also be explored.

Results

Questionnaire measures

One-way analyses of variance (ANOVA) were used to compare the scores of the three groups on the questionnaires (see Table 1.).

| | Control | Depression | Eating Disorder | ANOVA |
|--|-------------------------|-----------------------------|-----------------------------|-------------------------|
| HINT (Self-critical thinking) | 2.76 (0.65) | 4.22 ^a (0.48) | 4.28 ^a (0.49) | $F(2,75)= 64.3, p<.001$ |
| MPS Negative Perfectionism | 52 (16) | 67 ^a (14) | 68 ^a (20) | $F(2,75)= 7.8, p= .001$ |
| CES-D (Depression Symptoms) | 11 (7) | 35 ^a (9) | 31 ^a (10) | $F(2,75)= 53.5, p<.001$ |
| WSAS (Functional impairment due to self-critical thinking) | 7 (5) | 23 ^a (9) | 19 ^a (10) | $F(2,75)= 28.3, p<.001$ |
| RSE (Self-esteem) | 21 (4) | 11 ^a (4) | 10 ^a (4) | $F(2,75)= 52.2, p<.001$ |
| RRQ (Rumination) | 2.41 (0.80) | 3.35 ^a (0.47) | 3.17 ^a (0.61) | $F(2,75)= 15.6, p<.001$ |
| SCS (Self-compassion) | 3.18 (0.72) | 2.12 ^a (0.47) | 1.96 ^a (0.51) | $F(2,74)= 34.0, p<.001$ |
| FSCRS: Inadequate self | 8 (5) | 18 ^a (4) | 20 ^a (5) | $F(2,75)= 47.6, p<.001$ |
| FSCRS: Hated self | 2 (2) | 8 (4) | 11 (3) | $F(2,75)= 51.3, p<.001$ |
| FSCRS: Reassured self | 21 (5) | 9 ^a (5) | 9 ^a (5) | $F(2,74)= 47.3, p<.001$ |
| FSCS: Self-correction | 18 ^a (12) | 20 ^{ab} (11) | 27 ^b (14) | $F(2,75)= 4.1, p=.021$ |
| FSCS: Self-persecution | 2 (3) | 10 (8) | 17 (9) | $F(2,75)= 29.1, p<.001$ |
| EDE-Q (Eating Disorder Symptoms) | 1.11 (0.97) | 2.54 (1.38) | 4.20 (0.98) | $F(2,75)= 49.5, p<.001$ |

Table 1. Means, standard deviations (in brackets), and results of one-way ANOVA comparing questionnaire scores by group. Values within a row that share a superscript are not significantly different (Post-hoc Tukey HSD).

Association between self-critical thinking, related constructs, and depressive symptoms

Pearson correlations were conducted to investigate the strength of the association between scores on the questionnaires (see Table 2.). As expected, there were significant moderate to high correlations between all of the measures.

| | | HINT | MPS Neg | RSE | RRQ | SCS | FSCRS | | | CES- D |
|----------------|-----------|--------|------------|--------|--------|--------|--------|--------|--------|-----------|
| | | | | | | | IS | HS | RS | |
| HINT | | - | .444* | -.858* | .714* | -.810* | .839* | .758* | -.755* | .816* |
| MPS Neg | | .444* | - | -.553* | .347* | -.569* | .497* | .304* | -.502* | .463* |
| RSE | | -.858* | -.553* | - | -.685* | .769* | -.844* | -.721* | .815* | -.804* |
| RRQ | | .714* | .347* | -.685* | - | -.733* | .723* | .549* | -.599* | .603* |
| SCS | | -.810* | -.569* | .769* | -.733* | - | -.825* | -.654* | .793* | -.685* |
| FSCRS | IS | .839* | .497* | -.844* | .723* | -.825* | - | .735* | -.731* | .746* |
| | HS | .758* | .304* | -.721* | .549* | -.654* | .735* | - | -.645* | .721* |
| | RS | -.755* | -.502* | .815* | -.599* | .793* | -.731* | -.645* | - | -.736* |
| CES-D | | .816* | .463* | -.804* | .603* | -.685* | .746* | .721* | -.736* | - |

Table 2. Pearson correlation coefficients for the questionnaire variables (HINT= Habit Index of Negative Thinking; MPS Neg= Negative Perfectionism subscale of Multidimensional Perfectionism Scale; RSE= Rosenberg Self-Esteem scale; RRQ= Rumination Responses Questionnaire; SCS= Self-compassion scale; FSCRS= Forms of Self Criticizing/attacking and reassurance scale; IS= Inadequate Self subscale; RS= Reassured Self subscale; HS= Hated Self subscale; CES-D= Centre for Epidemiological Studies Depression Scale). * $p < .05$

Due to high correlations between many of the questionnaire pack measures (see Table 2.) it was not possible to enter all these as independent variables in regression analyses investigating depressive symptoms as the dependent variable. The HINT mean score, and total MPS negative perfectionism scores were therefore used due to a lower correlation between these variables ($r = .444$, $p < .001$). A stepwise multiple regression showed that of these two variables, only the HINT was a significant predictor of depressive symptoms as measured by the CES-D, explaining 66% of the variance (Adjusted R^2): $F(1,76) = 151.8$, $p < .001$, HINT $\beta = .816$, $p < .001$.

Content of self-critical thinking

To examine the content and frequency of participants' self-critical thoughts in the past week, the questionnaire response options of 'never', 'occasionally', 'several times a week', 'most days', 'many times a day', and 'most or all of the time' were assigned scores of 1-6 respectively, and group means for each self-critical topic calculated. The depression group had on average experienced most self-critical thoughts about their mood ($M = 4.73$, $SD = 1.31$), their feelings ($M = 4.54$, $SD = 1.42$), and their future ($M = 4.54$, $SD = 1.58$). For the eating disorder group the most common topics were their eating ($M = 5.38$, $SD = 1.06$), their weight or body shape ($M = 5.15$, $SD = 1.35$), and their appearance ($M = 5.08$, $SD = 1.23$). Aside from eating disorder-related topics, the most common topics were their feelings ($M = 4.46$, $SD = 1.56$), their mood ($M = 4.42$, $SD = 1.47$), and their thoughts ($M =$

4.38, SD= 1.39). The control group reported less frequent self-critical thoughts; the most common topics were their appearance (M= 2.62, SD= 1.33), their weight or body shape (M= 2.58, SD= 1.21), and their physical fitness (M= 2.58, SD= 1.14).

Participant interviews

Analysis of the interview data is planned for summer 2014.

Beliefs about self-critical thinking

One-way ANOVAs were used to compare the three groups' beliefs about self-critical thinking (see Table 3.). The statements and rating scales are provided in the method section.

| | Control | Depression | Eating Disorder | ANOVA |
|---|---------------------------|---------------------------|---------------------------|-------------------------|
| Controllability of self-critical thinking (0-10) | 7.3 (1.9) | 2.8 ^a (1.9) | 2.7 ^a (1.6) | $F(2,58)= 29.4, p<.001$ |
| Changes to self-critical thinking (0-10) | 4.5 (2.9) | 8.4 (1.7) | 6.8 (2.3) | $F(2,60)= 13.5, p<.001$ |
| Self-critical thinking has benefits for me (1-7) | 2.7 ^a (1.2) | 4.9 (1.5) | 3.5 ^a (1.6) | $F(2,75)= 16.7, p<.001$ |
| Self-critical thinking has disadvantages for me (1-7) | 3.3 (1.4) | 1.9 ^a (1.0) | 1.8 ^a (1.0) | $F(2,75)= 12.2, p<.001$ |
| I would like to reduce my self-criticism (1-7) | 3.5 (1.4) | 1.6 ^a (0.9) | 2.0 ^a (1.2) | $F(2,75)= 18.6, p<.001$ |
| Being self-critical is part of my personality (1-7) | 3.3 ^a (1.7) | 3.0 ^a (2.0) | 1.9 (0.8) | $F(2,75)= 5.2, p=.007$ |
| My self-criticism is a learnt habit that could be unlearnt (1-7) | 4.2 (1.7) | 2.8 ^a (1.2) | 3.2 ^a (1.1) | $F(2,75)= 7.6, p=.001$ |
| It would be difficult to reduce my self-criticism (1-7) | 3.3 (1.6) | 2.4 ^a (1.2) | 1.7 ^a (0.6) | $F(2,75)= 12.2, p<.001$ |
| I would be interested in advice about how to reduce my self-criticism (1-7) | 3.5 (1.5) | 1.3 ^a (0.5) | 1.8 ^a (1.1) | $F(2,74)= 28.9, p<.001$ |

Table 3. Means, standard deviations (in brackets), and results of one-way ANOVA of three groups' beliefs about self-critical thinking. Values within a row that share a superscript are not significantly different (Post-hoc Tukey HSD).

Discussion

Points for discussion are outlined below:

- On all questionnaire pack measures apart from the self-correction subscale of the FSCS, both clinical groups were significantly different to controls. There were no

differences between the two clinical groups other than on the EDE-Q, the Hated Self subscale of the FSCRS, and the self-persecution subscale of the FSCS. This suggests that the eating disorder group reported being more harsh in their self-critical thinking than the depression group.

- Habitual self-critical thinking as measured by the HINT was significantly correlated with the other questionnaire pack variables. However, the high correlations between all the questionnaire pack variables complicates the interpretation of this.
- The HINT was a stronger predictor of depressive symptoms than MPS Negative Perfectionism. This finding is consistent with literature and theoretical work described in the primary paper.
- As expected, the eating disorder group described most self-critical thoughts about shape, weight, eating, and appearance. However they also described frequent self-critical thoughts about their mood and feelings, which also occurred in the depression group. This suggests that there may be both condition-specific, and transdiagnostic self-critical content present during psychological difficulties.
- On most of the Likert scale ratings, both clinical groups were significantly different from controls, but not from each other. However some differences between the clinical groups were present, with the eating disorder group rating self-critical thinking as having more benefits and being more personality-driven than the depression group, and perhaps as a result showed less desire to change their self-critical thinking.

Dissemination Plans

It is planned that this paper will be submitted to a peer-reviewed journal, and it is hoped will be considered a useful complement to the primary paper, communicating the lived experiences and in some cases extreme difficulties people experience with self-critical thinking.

References

- Fairburn, C. G., & Beglin, S. (2008). Eating Disorder Examination Questionnaire. In C. G. Fairburn (Ed.), *Cognitive Behaviour Therapy and Eating Disorders*. New York: Guildford Press.
- Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, J. I., & Neubauer, A. L. (1993). A comparison of two measures of perfectionism. *Personality and Individual Differences*, 14(1), 119-126.
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14(5), 449-468.

- Gilbert, P., Clarke, M., Hempel, S., Miles, J., & Irons, C. (2004). Criticizing and reassuring oneself: An exploration of forms, styles and reasons in female students. *British Journal of Clinical Psychology*, 43(1), 31-50.
- Gray-Little, B., Williams, V. S., & Hancock, T. D. (1997). An item response theory analysis of the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin*, 23(5), 443-451.
- Kupeli, N., Chilcot, J., Schmidt, U. H., Campbell, I. C., & Troop, N. A. (2013). A confirmatory factor analysis and validation of the forms of self-criticism/reassurance scale. *British Journal of Clinical Psychology*, 52, 12-25.
- Mundt, J. C., Marks, I. M., Shear, M. K., & Greist, J. M. (2002). The Work and Social Adjustment Scale: a simple measure of impairment in functioning. *The British Journal of Psychiatry*, 180(5), 461-464.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied psychological measurement*, 1(3), 385-401.
- Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the Self-Compassion Scale. *Clinical Psychology & Psychotherapy*, 18(3), 250-255.
- Rosenberg, M. (1986). *Conceiving the self*. New York: Basic Books.
- Trapnell, P. D., & Campbell, J. D. (1999). Private self-consciousness and the five-factor model of personality: Distinguishing rumination from reflection. *Journal of personality and social psychology*, 76(2), 284.
- Verplanken, B., Friborg, O., Wang, C. E., Trafimow, D., & Woolf, K. (2007). Mental habits: Metacognitive reflection on negative self-thinking. *Journal of personality and social psychology*, 92(3), 526.
- Weissman, M. M., Sholomskas, D., Pottenger, M., Prusoff, B. A., & Locke, B. Z. (1977). Assessing depressive symptoms in five psychiatric populations: a validation study. *American Journal of Epidemiology*, 106(3), 203-214.

Interview Protocol

"The next section of today will be a discussion about self-critical thinking. This section I'm going to record so that I can refer back to it later. We are looking to understand people's experiences of thinking in a self-critical way, so there are no right or wrong answers. If there are any questions you would rather not answer that's fine, just let me know.

- *Do you ever have self-critical thoughts?*
 - *How often?*
- *I am going to ask you what the thoughts are about, but remember you don't have to talk about this if you don't want to.*
 - *Do they tend to be about the same topic or many different things?*
 - *Do you feel able to give me a broad idea about what the self-critical thoughts are about?*
 - *Would you feel able to give me any examples? [only get information to the point where the participant feels comfortable]*

Thank you for that, I have a few more written questions for you to answer about this before we move on to the rest of the discussion.

(Questionnaire on self-critical thinking content)

- *Thank you, did you find that completing that made you think of anything you maybe hadn't thought of before?*

- *How long does the self-critical thinking last in general (e.g. just very brief thoughts popping into your mind for a second or much longer lasting?).*
 - *If both, which is more common/proportion of each?*
- *Are there any particular situations where you are more likely to experience self-critical thoughts?*
 - *Can they be brought on by things happening around you? What kinds of things?*
 - *Particular situations*
 - *Times of day*
 - *Certain people*
 - *Things others do or say*
 - *Can they be brought on by things you do (or don't do)?*
 - *Can they be brought on by things inside you like feelings or other thoughts?*
 - *Feel a certain way*
 - *Think about a certain thing*
 - *When my mood is low/feeling anxious*
 - *Is being low in mood in itself enough to make you self-critical? Or does it just make you more susceptible to the other things you've discussed?*

If report more than one of these: which is most common?

- *How much control do you have over the self-critical thinking?*
 - *On a scale from 0 to 10 where 0 is not at all controllable and 10 being totally controllable, how would you view self-critical thinking?*
 - *Do the self-critical thoughts seem to pop into your mind automatically without you doing anything deliberate? [prompt for details]*
 - *Do you sometimes deliberately start criticising yourself? If so, why?*
 - *What proportion of your self-critical thoughts pop into your mind automatically and what proportion do you do deliberately?" (Explain further if necessary)*

% automatic= _____ % deliberate = _____

 - *How easily can you stop having the self-critical thoughts?*
 - *How do you stop them?*
 - *What other things make it more likely that the self-critical thoughts will stop?*
- *What kind of effects do self-critical thoughts have on you? [Prompt as necessary, below, to obtain full range of both positive and negative effects]*
 - *What are the advantages and disadvantages of having self-critical thoughts?*
 - *Overall, do you see it as being a positive or negative thing?*
 - *Are there any ways that it might help you?*
 - *Are there any ways it might cause problems for you or have bad effects?*
 - *Does it affect your mood?*

- Does it affect how you feel about yourself more generally?
- Does it affect how you relate to other people?
- Ok so I've got a couple of statements for you to rate on this scale (show scale) so where 1 is totally agree, 7 being totally disagree and 4 being neutral. (Give participants sheet with statements on and read out)
 - **Self-critical thinking has benefits for me**
 - **Self-critical thinking has disadvantages for me**
- Have you always had self-critical thoughts?
 - What is your earliest memory of thinking in this way?
 - How do you think it started? (e.g. learnt from others, related to personality trait)
 - Why do you think self-critical thinking continues?
- Would you like to change anything about your self-critical thinking? If so, what? (ask on 0-10 scale where 0 is I wouldn't change anything and 10 I want to change everything about my self-critical thinking)
 - Would you like to change how often you think self-critically?
 - Would you like to change the topic of your self-critical thoughts?
 - How easy or hard do you think this would be? Why?
 - What do you think would help you to change your self-critical thinking?
 - Ok so I've got a couple more statements for you to rate on the 1-7 scale again (give sheet with statements and read)
 - **I would like to reduce my self-criticism**
 - **Being self-critical is part of my personality**
 - **My self-criticism is a learnt habit that could be unlearned**
 - **It would be difficult to reduce my self-criticism**
 - **I would be interested in advice about how to reduce my self-criticism**
- Do you have any other comments you would like to make about your experiences of self-criticism?

Ok so that's the end of the section so I'll turn off the recorder."

Questionnaire on Self-Critical Thinking Content

Self-critical thinking

Sometimes we have thoughts about ourselves. Here we are interested in critical thoughts you may have about yourself. Self-critical thoughts may be so brief or automatic that you are not even fully aware of them occurring. The thoughts may pop into your head without you wanting to have them, or you may deliberately criticise yourself. We are interested in ALL types of self-critical thoughts that you have.

How often have you had SELF-CRITICAL thoughts about yourself over the past week? Please tick ☐ response below

| Over the past week, I have had self-critical thoughts about.... | Never | Occasionally | Several times a week | Most days | Many times a day | Most or all of the time |
|---|-------|--------------|----------------------|-----------|------------------|-------------------------|
| How I come across to others | | | | | | |
| Things I have said | | | | | | |
| Things I have done | | | | | | |
| My future | | | | | | |
| My intelligence | | | | | | |
| My work / study | | | | | | |
| My housework / home care | | | | | | |
| My personality | | | | | | |
| My appearance | | | | | | |
| My weight or body shape | | | | | | |
| My physical fitness | | | | | | |
| My eating | | | | | | |
| My health | | | | | | |
| My health-related behaviours | | | | | | |
| How I behave towards others | | | | | | |
| How I behave towards myself | | | | | | |
| My relationships with family | | | | | | |
| My relationships with friends | | | | | | |
| My relationships at work / college | | | | | | |
| My closest relationship | | | | | | |

| Over the past week, I have had self-critical thoughts about.... | Never | Occasionally | Several times a week | Most days | Many times a day | Most or all of the time |
|---|-------|--------------|----------------------|-----------|------------------|-------------------------|
| My feelings | | | | | | |
| My mood | | | | | | |
| My thoughts | | | | | | |
| How successful I am | | | | | | |
| How worthwhile I am | | | | | | |
| How nice a person I am | | | | | | |
| How good a person I am | | | | | | |
| Other topics? Please write below: 1) _____ 2) _____ 3) _____ | | | | | | |

If you feel able to do so, please list the three most frequent critical thoughts you have about yourself:

| | |
|----|--|
| 1. | |
| 2. | |
| 3. | |

On a typical day, about what percentage of the time do you have self-critical thoughts?
 _____ %

Appendix IX - Main Research Project: Questionnaire Pack

The order of questionnaires in the pack is presented below:

- Depressive Experiences Questionnaire (DEQ)
- Frost Multidimensional Perfectionism Scale (MPS)
- Habit Index of Negative Thinking (HINT)
- Work and Social Adjustment Scale (WSAS)
- Rosenberg Self-Esteem Scale (RSE)
- Rumination Responses Questionnaire (RRQ)
- Centre for Epidemiological Studies Depression Scale (CES-D)
- Forms of Self Criticizing/attacking and reassurance scale (FSCRS)
- Functions of Self Criticizing/attacking scale (FSCS)
- Self-compassion scale Short Form (SCS)
- Eating Disorder Examination Questionnaire (EDE-Q)

Questionnaire pack

Please read through and complete the questionnaires in this pack. Instructions are given at the start of each one.

Your wellbeing while completing questionnaires

There are lots of questions, so please feel free to take breaks in the middle if you are getting tired!

As some questions ask about how you think and feel, it is possible that you may find them upsetting. If this happens, please do stop if you wish. If you wanted to return to them after a break that would be fine, or if you didn't want to do any more, that would be fine too. The top priority is your wellbeing.

If you wanted to speak to someone about your experiences of completing the pack, please contact the research team (contact details are on the Participant Information Sheet). There will also be the opportunity to talk to Graham Thew when you do the additional face-to-face part of the study.

Thank you

Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree and to what extent. If you strongly agree, circle 7; if you strongly disagree, circle 1; the midpoint, if you are neutral or undecided, is 4.

| | | Strongly Disagree | | | | | | Strongly Agree |
|----|--|----------------------|---|---|---|---|---|-------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | I set my personal goals and standards as high as possible. | | | | | | | |
| 2 | Without support from others who are close to me, I would be helpless. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3 | I tend to be satisfied with my current plans and goals, rather than striving for higher goals. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4 | Sometimes I feel very big, and other times I feel very small. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5 | When I am closely involved with someone, I never feel jealous. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6 | I urgently need things that only other people can provide. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7 | I often find that I don't live up to my own standards or ideals. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | I feel I am always making full use of my potential abilities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9 | The lack of permanence in human relationships doesn't bother me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10 | If I fail to live up to expectations, I feel unworthy. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11 | Many times I feel helpless. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12 | I seldom worry about being criticized for things I have said or done. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13 | There is a considerable difference between how I am now and how I would like to be. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14 | I enjoy sharp competition with others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15 | I feel I have many responsibilities that I must meet. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16 | There are times when I feel "empty" inside. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17 | I tend not to be satisfied with what I have. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18 | I don't care whether or not I live up to what other people expect of me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19 | I become frightened when I feel alone. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20 | I would feel like I'd be losing an important part of myself if I lost a very close friend. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | | | | | | | |
|----|---|---|---|---|---|---|---|---|
| 21 | People will accept me no matter how many mistakes I have made. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22 | I have difficulty breaking off a relationship that is making me unhappy. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23 | I often think about the danger of losing someone who is close to me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24 | Other people have high expectations of me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25 | When I am with others, I tend to devalue or "undersell" myself. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26 | I am not very concerned with how other people respond to me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 27 | No matter how close a relationship between two people is, there is always a large amount of uncertainty and conflict. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 28 | I am very sensitive to others for signs of rejection. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 29 | It's important for my family that I succeed. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 30 | Often, I feel I have disappointed others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 31 | If someone makes me angry, I let him (her) know how I feel. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 32 | I constantly try, and very often go out of my way, to please or help people I am close to. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 33 | I have many inner resources (abilities, strengths). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 34 | I find it very difficult to say "No" to the requests of friends. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 35 | I never really feel secure in a close relationship. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 36 | The way I feel about myself frequently varies: there are times when I feel extremely good about myself and other times when I see only the bad in me and feel like a total failure. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 37 | Often, I feel threatened by change. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 38 | Even if the person who is closest to me were to leave, I could still "go it alone." | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 39 | One must continually work to gain love from another person: that is, love has to be earned. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | | | | | | | |
|----|--|---|---|---|---|---|---|---|
| 40 | I am very sensitive to the effects my words or actions have on the feelings of other people. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 41 | I often blame myself for things I have done or said to someone. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 42 | I am a very independent person. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 43 | I often feel guilty. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 44 | I think of myself as a very complex person, one who has "many sides." | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 45 | I worry a lot about offending or hurting someone who is close to me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 46 | Anger frightens me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 47 | It is not "who you are," but "what you have accomplished" that counts. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 48 | I feel good about myself whether I succeed or fail. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 49 | I can easily put my own feelings and problems aside, and devote my complete attention to the feelings and problems of someone else. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 50 | If someone I cared about became angry with me, I would feel threatened that he (she) might leave me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 51 | I feel comfortable when I am given important responsibilities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 52 | After a fight with a friend, I must make amends as soon as possible. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 53 | I have a difficult time accepting weaknesses in myself. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 54 | It is more important that I enjoy my work than it is for me to have my work approved. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 55 | After an argument, I feel very lonely. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 56 | In my relationships with others, I am very concerned about what they can give to me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 57 | I rarely think about my family. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 58 | Very frequently, my feelings toward someone close to me vary: there are times when I feel completely angry and other times when I feel all-loving towards that person. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 59 | What I do and say has a very strong impact on those around me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | | | | | | | |
|----|---|---|---|---|---|---|---|---|
| 60 | I sometimes feel that I am "special." | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 61 | I grew up in an extremely close family. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 62 | I am very satisfied with myself and my accomplishments. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 63 | I want many things from someone I am close to. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 64 | I tend to be very critical of myself. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 65 | Being alone doesn't bother me at all. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 66 | I very frequently compare myself to standards or goals. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| Please circle the number that best corresponds to your agreement with each statement below. | Strongly disagree | | | | | Strongly agree | | | | |
|--|-------------------|---|---|---|---|----------------|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 1. My parents set very high standards for me. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 2. Organisation is very important to me. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 3. As a child, I was punished for doing things less than perfectly. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 4. If I do not set the highest standards for myself, I am likely to end up a second-rate person. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 5. My parents never tried to understand my mistakes. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 6. It is important to me that I be thoroughly competent in everything I do. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 7. I am a neat person. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 8. I try to be an organised person. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 9. If I fail at work / school, I am a failure as a person. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 10. I should be upset if I make a mistake. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 11. My parents wanted me to be the best at everything. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 12. I set higher goals than most people. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 13. If someone does a task at work / school better than I, then I feel like I failed the whole task. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 14. If I fail partly, it is as bad as being a complete failure. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 15. Only outstanding performance is good enough in my family. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 16. I am very good at focusing my efforts on attaining a goal. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 17. Even when I do something very carefully, I often feel that it is not quite right. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 18. I hate being less than best at things. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 19. I have extremely high goals. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 20. My parents have expected excellence from me. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 21. People will probably think less of me if I make a mistake. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 22. I never felt like I could meet my parents' expectations. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 23. If I do not do as well as other people, it means I am an inferior human being. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 24. Other people seem to accept lower standards from themselves than I do. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| 25. If I do not do well all the time, people will not respect me. | 1 | 2 | 3 | 4 | 5 |
| 26. My parents have always had higher expectations for my future than I have. | 1 | 2 | 3 | 4 | 5 |
| 27. I try to be a neat person. | 1 | 2 | 3 | 4 | 5 |
| 28. I usually have doubts about the simple everyday things I do. | 1 | 2 | 3 | 4 | 5 |
| 29. Neatness is very important to me. | 1 | 2 | 3 | 4 | 5 |
| 30. I expect higher performance in my daily tasks than most people. | 1 | 2 | 3 | 4 | 5 |
| 31. I am an organised person. | 1 | 2 | 3 | 4 | 5 |
| 32. I tend to get behind in my work because I repeat things over and over. | 1 | 2 | 3 | 4 | 5 |
| 33. It takes me a long time to do something 'right'. | 1 | 2 | 3 | 4 | 5 |
| 34. The fewer mistakes I make, the more people will like me. | 1 | 2 | 3 | 4 | 5 |
| 35. I never felt like I could meet my parents' standards. | 1 | 2 | 3 | 4 | 5 |

Sometimes we think about ourselves. Some of those thoughts may be positive but some may be negative or self-critical. In this questionnaire we are interested in negative or critical thoughts you may have about yourself. Please indicate how much you agree or disagree with the following statements.

Each question starts like this:

HAVING NEGATIVE OR CRITICAL THOUGHTS ABOUT MYSELF IS SOMETHING ...

| | Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
|---|----------------|-------|---------|----------|-------------------|
| I do frequently | | | | | |
| I do automatically | | | | | |
| I do unintentionally | | | | | |
| that feels sort of natural to me | | | | | |
| I do without further thinking | | | | | |
| that would require mental effort to leave | | | | | |
| I do every day | | | | | |
| I start doing before I realize I'm doing it | | | | | |
| I would find it hard not to do | | | | | |
| I don't do on purpose | | | | | |
| that's typically "me" | | | | | |
| I have been doing for a long time | | | | | |
| that occurs no matter what I'm doing | | | | | |
| I don't exactly intend to do | | | | | |
| I do again and again | | | | | |
| I can hardly stop | | | | | |
| I do while doing other things | | | | | |
| that makes up part of who I am | | | | | |
| I have no control over | | | | | |
| that doesn't serve a clear purpose | | | | | |
| I am not aware I start doing | | | | | |
| I can do anytime anywhere | | | | | |
| I don't choose to do consciously | | | | | |
| I just find myself doing | | | | | |
| that seems to be a part of who I am | | | | | |

Self-critical thinking can affect people's ability to do certain day-to-day tasks in their lives. Please circle below to indicate how self-critical thinking impairs your ability to carry out the activity.

| | | | | | | | | |
|--|----------|---|------------|---|----------|---|--------------------------------------|---|
| Because of my self-critical thinking my ability to <u>go to work</u> or <u>attend school/college</u> is impaired | | | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Not at All | Slightly | | Definitely | | Markedly | | Very severely impaired / Cannot work | |

| | | | | | | | | |
|---|----------|---|------------|---|----------|---|------------------------|---|
| Because of my self-critical thinking my <u>home management</u> is impaired (cleaning, shopping, cooking, child care, paying bills, etc) | | | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Not at All | Slightly | | Definitely | | Markedly | | Very severely impaired | |

| | | | | | | | | |
|---|----------|---|------------|---|----------|---|------------------------|---|
| Because of my self-critical thinking my <u>social & leisure</u> activities are impaired (activities with other people, e.g. outings, visitors, parties, etc) | | | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Not at All | Slightly | | Definitely | | Markedly | | Very severely impaired | |

| | | | | | | | | |
|---|----------|---|------------|---|----------|---|------------------------|---|
| Because of my self-critical thinking my <u>private</u> leisure activities are impaired (activities done alone, e.g. reading, gardening, walking alone, sewing, etc) | | | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Not at All | Slightly | | Definitely | | Markedly | | Very severely impaired | |

| | | | | | | | | |
|---|----------|---|------------|---|----------|---|------------------------|---|
| Because of my self-critical thinking my ability to form and maintain <u>relationships</u> is impaired | | | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Not at All | Slightly | | Definitely | | Markedly | | Very severely impaired | |

Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

| | | Strongly Agree | Agree | Disagree | Strongly Disagree |
|-----|--|---------------------------|--------------|-----------------|------------------------------|
| 1. | On the whole, I am satisfied with myself. | SA | A | D | SD |
| 2. | At times, I think I am no good at all. | SA | A | D | SD |
| 3. | I feel that I have a number of good qualities. | SA | A | D | SD |
| 4. | I am able to do things as well as most other people. | SA | A | D | SD |
| 5. | I feel I do not have much to be proud of. | SA | A | D | SD |
| 6. | I certainly feel useless at times. | SA | A | D | SD |
| 7. | I feel that I'm a person of worth, at least on an equal plane with others. | SA | A | D | SD |
| 8. | I wish I could have more respect for myself. | SA | A | D | SD |
| 9. | All in all, I am inclined to feel that I am a failure. | SA | A | D | SD |
| 10. | I take a positive attitude toward myself. | SA | A | D | SD |

For each of the following statements, please indicate your level of agreement or disagreement by using the scale below.

| | Strongly disagree 0 | Disagree 1 | Neutral 2 | Agree 3 | Strongly Agree 4 |
|-----|---|---------------|--------------|------------|------------------------|
| 1. | I tend to “ruminate” or dwell over things that happen to me for a really long time afterward | | | | _____ |
| 2. | Often I’m playing back over in my mind how I acted in a past situation | | | | _____ |
| 3. | I always seem to be rehashing in my mind recent things I’ve said or done | | | | _____ |
| 4. | Long after an argument or disagreement is over with, my thoughts keep going back to what happened | | | | _____ |
| 5. | I don’t waste time rethinking things that are over and done with | | | | _____ |
| 6. | I often find myself re-evaluating something I’ve done | | | | _____ |
| 7. | I often reflect on episodes in my life that I should no longer concern myself with | | | | _____ |
| 8. | I spend a great deal of time thinking back over my embarrassing or disappointing moments | | | | _____ |
| 9. | I never ruminate or dwell on myself for very long | | | | _____ |
| 10. | It is easy for me to put unwanted thoughts out of my mind | | | | _____ |
| 11. | Sometimes it is hard for me to shut off thoughts about myself | | | | _____ |
| 12. | My attention is often focused on aspects of myself I wish I’d stop thinking about | | | | _____ |

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

| | During the Past Week | | | |
|--|--|---|--|------------------------------------|
| | Rarely or none of the time (less than 1 day) | Some or a little of the time (1-2 days) | Occasionally or a moderate amount of time (3-4 days) | Most or all of the time (5-7 days) |
| 1. I was bothered by things that usually don't bother me. | | | | |
| 2. I did not feel like eating; my appetite was poor. | | | | |
| 3. I felt that I could not shake off the blues even with help from my family or friends. | | | | |
| 4. I felt I was just as good as other people. | | | | |
| 5. I had trouble keeping my mind on what I was doing. | | | | |
| 6. I felt depressed. | | | | |
| 7. I felt that everything I did was an effort. | | | | |
| 8. I felt hopeful about the future. | | | | |
| 9. I thought my life had been a failure. | | | | |
| 10. I felt fearful. | | | | |
| 11. My sleep was restless. | | | | |
| 12. I was happy. | | | | |
| 13. I talked less than usual. | | | | |
| 14. I felt lonely. | | | | |
| 15. People were unfriendly. | | | | |
| 16. I enjoyed life. | | | | |
| 17. I had crying spells. | | | | |
| 18. I felt sad. | | | | |
| 19. I felt that people dislike me. | | | | |
| 20. I could not get "going". | | | | |

When things go wrong in our lives or don't work out as we hoped, and we feel we could have done better, we sometimes have *negative and self-critical thoughts and feelings*. These may take the form of feeling worthless, useless or inferior etc. However, people can also try to be supportive of themselves. Below are a series of thoughts and feelings that people sometimes have. Read each statement carefully and circle the number that best describes how much each statement is true for you.

Please use the scale below:

| | Not at all like me 0 | A little bit like me 1 | Moderately like me 2 | Quite a bit like me 3 | Extremely like me 4 |
|---|----------------------------|---------------------------------|----------------------------|--------------------------------|---------------------------|
| When things go wrong for me: | Not at all like me 0 | A little bit like me 1 | Moderately like me 2 | Quite a bit like me 3 | Extremely like me 4 |
| 1. I am easily disappointed with myself. | 0 | 1 | 2 | 3 | 4 |
| 2. There is a part of me that puts me down. | 0 | 1 | 2 | 3 | 4 |
| 3. I am able to remind myself of positive things about myself. | 0 | 1 | 2 | 3 | 4 |
| 4. I find it difficult to control my anger and frustration at myself. | 0 | 1 | 2 | 3 | 4 |
| 5. I find it easy to forgive myself. | 0 | 1 | 2 | 3 | 4 |
| 6. There is a part of me that feels I am not good enough. | 0 | 1 | 2 | 3 | 4 |
| 7. I feel beaten down by my own self-critical thoughts. | 0 | 1 | 2 | 3 | 4 |
| 8. I still like being me. | 0 | 1 | 2 | 3 | 4 |
| 9. I have become so angry with myself that I want to hurt or injure myself. | 0 | 1 | 2 | 3 | 4 |

| | | Not at all like me | A little bit like me | Moderately like me | Quite a bit like me | Extremely like me |
|-----|---|-------------------------------|-------------------------------------|-------------------------------|------------------------------------|------------------------------|
| | When things go wrong for me: | | | | | |
| 10. | I have a sense of disgust with myself. | 0 | 1 | 2 | 3 | 4 |
| 11. | I can still feel lovable and acceptable. | 0 | 1 | 2 | 3 | 4 |
| 12. | I stop caring about myself. | 0 | 1 | 2 | 3 | 4 |
| 13. | I find it easy to like myself. | 0 | 1 | 2 | 3 | 4 |
| 14. | I remember and dwell on my failings. | 0 | 1 | 2 | 3 | 4 |
| 15. | I call myself names. | 0 | 1 | 2 | 3 | 4 |
| 16. | I am gentle and supportive with myself. | 0 | 1 | 2 | 3 | 4 |
| 17. | I can't accept failures and setbacks without feeling inadequate. | 0 | 1 | 2 | 3 | 4 |
| 18. | I think I deserve my self-criticism. | 0 | 1 | 2 | 3 | 4 |
| 19. | I am able to care and look after myself. | 0 | 1 | 2 | 3 | 4 |
| 20. | There is a part of me that wants to get rid of the bits I don't like. | 0 | 1 | 2 | 3 | 4 |
| 21. | I encourage myself for the future. | 0 | 1 | 2 | 3 | 4 |
| 22. | I do not like being me. | 0 | 1 | 2 | 3 | 4 |

There can be many reasons why people become critical and angry with themselves. Read each statement carefully and circle the number that best describes how much each statement is true for you.

Use the scale below:

| | Not at all like me 0 | A little bit like me 1 | Moderately like me 2 | Quite a bit like me 3 | Extremely like me 4 |
|--|-------------------------------|-------------------------------------|-------------------------------|------------------------------------|------------------------------|
| I get critical and angry with myself: | Not at all like me | A little bit like me | Moderately like me | Quite a bit like me | Extremely like me |
| 1 To make sure I keep up my standards. | 0 | 1 | 2 | 3 | 4 |
| 2 To stop myself being happy. | 0 | 1 | 2 | 3 | 4 |
| 3 To show I care about my mistakes. | 0 | 1 | 2 | 3 | 4 |
| 4 Because, if I punish myself I feel better. | 0 | 1 | 2 | 3 | 4 |
| 5 To stop me being lazy. | 0 | 1 | 2 | 3 | 4 |
| 6 To harm part of myself. | 0 | 1 | 2 | 3 | 4 |
| 7 To keep myself in check. | 0 | 1 | 2 | 3 | 4 |
| 8 To punish myself for my mistakes. | 0 | 1 | 2 | 3 | 4 |
| 9 To cope with feelings of disgust with myself. | 0 | 1 | 2 | 3 | 4 |
| 10 To take revenge on part of myself. | 0 | 1 | 2 | 3 | 4 |
| 11 To stop me getting overconfident. | 0 | 1 | 2 | 3 | 4 |
| 12 To stop me being angry with others | 0 | 1 | 2 | 3 | 4 |
| 13 To destroy a part of me. | 0 | 1 | 2 | 3 | 4 |
| 14 To make me concentrate. | 0 | 1 | 2 | 3 | 4 |
| 15 To gain reassurance from others. | 0 | 1 | 2 | 3 | 4 |
| 16 To stop me becoming arrogant. | 0 | 1 | 2 | 3 | 4 |

| | I get critical and angry with myself: | Not at all like me | A little bit like me | Moderately like me | Quite a bit like me | Extremely like me |
|----|--|-------------------------------|-------------------------------------|-------------------------------|--------------------------------|------------------------------|
| 17 | To prevent future embarrassments. | 0 | 1 | 2 | 3 | 4 |
| 18 | To remind me of my past failures | 0 | 1 | 2 | 3 | 4 |
| 19 | To keep me from making minor mistakes. | 0 | 1 | 2 | 3 | 4 |
| 20 | To remind me of my responsibilities. | 0 | 1 | 2 | 3 | 4 |
| 21 | To get at the things I hate in myself. | 0 | 1 | 2 | 3 | 4 |

If you can think of any other reasons why you become self-critical please write them in the space below:

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. To the left of each item, indicate how often you feel or behave in the stated manner, using the following scale:

| | | | | | |
|-------------------------|----------|----------|----------|----------|--------------------------|
| Almost never | | | | | Almost always |
| 1 | 2 | 3 | 4 | 5 | |

- _____1. When I fail at something important to me I become consumed by feelings of inadequacy.
- _____2. I try to be understanding and patient towards those aspects of my personality I don't like.
- _____3. When something painful happens I try to take a balanced view of the situation.
- _____4. When I'm feeling down, I tend to feel like most other people are probably happier than I am.
- _____5. I try to see my failings as part of the human condition.
- _____6. When I'm going through a very hard time, I give myself the caring and tenderness I need.
- _____7. When something upsets me I try to keep my emotions in balance.
- _____8. When I fail at something that's important to me, I tend to feel alone in my failure
- _____9. When I'm feeling down I tend to obsess and fixate on everything that's wrong.
- _____10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.
- _____11. I'm disapproving and judgmental about my own flaws and inadequacies.
- _____12. I'm intolerant and impatient towards those aspects of my personality I don't like.

Instructions: The following questions are concerned with the past four weeks (28 days) only. Please read each question carefully. Please answer all the questions. Thank you.

Questions 1 to 12: Please circle the appropriate number on the right. Remember that the questions only refer to the past four weeks (28 days) only.

| On how many of the past 28 days... | No days | 1-5 days | 6-12 days | 13-15 days | 16-22 days | 23-27 days | Every day |
|---|----------------|-----------------|------------------|-------------------|-------------------|-------------------|------------------|
| 1. Have you been deliberately <u>trying</u> to limit the amount of food you eat to influence your shape or weight? (whether or not you have succeeded) | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. Have you gone for long periods of time (8 waking hours or more) without eating anything at all in order to influence your shape or weight? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. Have you <u>tried</u> to exclude from your diet any foods that you like in order to influence your shape or weight (whether or not you have succeeded)? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. Have you <u>tried</u> to follow definite rules regarding your eating (for example, a calorie limit) in order to influence your shape or weight (whether or not you have succeeded)? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. Have you had a definite desire to have an empty stomach with the aim of influencing your shape or weight | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. Have you had a definite desire to have a <u>totally flat</u> stomach? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. Has thinking about <u>food, eating or calories</u> made it very difficult to concentrate on things you are interested in (for example, working, following a conversation, or reading)? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. Has thinking about <u>shape or weight</u> made it very difficult to concentrate on things you are interested in (for example, working, following a conversation, or reading)? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. Have you had a definite fear of losing control over eating? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

| | | | | | | | |
|--|---|---|---|---|---|---|---|
| 10. Have you had a definite fear that you might gain weight? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. Have you felt fat? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. Have you had a strong desire to lose weight? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

Questions 13-18: Please fill in the appropriate number in the boxes on the right. Remember that the questions only refer to the past four weeks (28 days).

Over the past four weeks (28 days)

13 Over the past 28 days, how many times have you eaten what other people would regard as an unusually large amount of food (given the circumstances)?

.....

14 On how many of these times did you have a sense of having lost control over your eating (at the time that you were eating)?

.....

15 Over the past 28 days, on how many **DAYS** have such episodes of overeating occurred (i.e., you have eaten an unusually large amount of food and have had a sense of loss of control at the time)?

.....

16 Over the past 28 days, how many times have you made yourself sick (vomit) as a means of controlling your shape or weight?

.....

17 Over the past 28 days, how many times have you taken laxatives as a means of controlling your shape or weight?

.....

18 Over the past 28 days, how many times have you exercised in a "driven" or "compulsive" way as a means of controlling your weight, shape or amount of fat, or to burn off calories?

.....

Questions 19 to 21: Please circle the appropriate number. Please note that for these questions the term "binge eating" means eating what others would regard as an unusually large amount of food for the circumstances, accompanied by a sense of having lost control over eating.

| | | | | | | | |
|--|-------------------|--------------------|----------------|-------------------|----------------|------------------|------------|
| 19 Over the past 28 days, on how many days have you eaten in secret (ie, furtively)? | No days | 1-5 days | 6-12 days | 13-15 days | 16-22 days | 23-27 days | Every day |
| Do not count episodes of binge eating | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 20 On what proportion of the times that you have eaten have you felt guilty (felt that you've done wrong) because of its effect on your shape or weight? | None of the times | A few of the times | Less than half | Half of the times | More than half | Most of the time | Every time |
| Do not count episodes of binge eating | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 21 Over the past 28 days, how concerned have you been about other people seeing you eat? | Not at all | | Slightly | | Moderately | | |
| Do not count episodes of binge eating | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

Questions 22 to 28: Please circle the appropriate number on the right. Remember that the questions only refer to the past four weeks (28 days).

| Over the past 28 days... | Not at all Markedly | | Slightly | | Moderately | | |
|---|------------------------|---|----------|---|------------|---|---|
| 22 Has your <u>weight</u> influenced how you think about (judge) yourself as a person? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 23 Has your <u>shape</u> influenced how you think about (judge) yourself as a person? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 24 How much would it have upset you if you had been asked to weigh yourself once a week (no more, or less, often) for the next four weeks? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 25 How dissatisfied have you been with your <u>weight</u> ? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 26 How dissatisfied have you been with your <u>shape</u> ? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 27 How uncomfortable have you felt seeing your body (for example, seeing your shape in the mirror, in a shop window reflection, while undressing or taking a bath or shower)? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 28 How uncomfortable have you felt about others seeing your shape or figure (for example, in communal changing rooms, when swimming, or wearing tight clothes)? | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

What is your weight at present? (Please give your best estimate.)

What is your height? (Please give your best estimate.)

If female: Over the past three-to-four months have you missed any menstrual periods?

If so, how many?

Have you been taking the "pill"?

Please answer the following questions about yourself

Your age: _____

Your gender: _____

Please list any current medical conditions: _____

Please list any current medication: _____

Have you ever experienced a psychological or psychiatric condition (e.g. depression, eating disorder, anxiety): Yes / No / Not sure

Please give further details: _____

If yes are you currently, or have you previously, received treatment for this:

Yes – medication, Yes – psychological therapy, No – no treatment received

What is the highest educational qualification you have already completed?

| No formal qualifications | GCSEs or O levels or equivalent | A levels or vocational Qualification or equivalent | University degree |
|--------------------------|---------------------------------|--|-------------------|
| | | | |

Which of these best describes your current work status?

| Full time work | Part time work | Student | Unemployed | Temporary Sick |
|---------------------------|----------------|------------------------|---------------|------------------------|
| | | | | |
| Permanent sick / disabled | Retired | Looking after children | Being a carer | Looking after the home |
| | | | | |

Which of these best describes your current financial circumstances?

| Living comfortably | Doing alright | Just about getting by | Finding it difficult to make ends meet |
|--------------------|---------------|-----------------------|--|
| | | | |

Which of these best describes your current marital status?

| | | | | |
|--------|--------------------------|------------------------------|------------------------|---------|
| Single | Partner, living apart | Married / living together | Divorced/ separated | Widowed |
| | | | | |

Ethnic Origin (Please circle the code for the group that you think is most appropriate for you)

| WHITE | CODE | BLACK OR BLACK BRITISH | CODE |
|----------------------------|------|----------------------------|------|
| British | A | Caribbean | M |
| Irish | B | African | N |
| Any other White background | C | Any other Black background | P |
| MIXED | | OTHER ETHNIC GROUPS | |
| White and Black Caribbean | D | Chinese | R |
| White and Black African | E | Any other ethnic group | S |
| White and Asian | F | | |
| Any other mixed background | G | | |
| ASIAN OR ASIAN BRITISH | | | |
| Indian | H | | |
| Pakistani | J | | |
| Bangladeshi | K | | |
| Any other Asian background | L | | |

THANK YOU

Appendix X - Main Research Project: REC Favourable Ethical Opinion Letter

Part of the research infrastructure for Wales funded by the National Institute for Social Care and Health Research, Welsh Government.
Yn rhannu o seilwaith ymchwil Cymru a ariannir gan y Sefydliad Cenedlaethol ar gyfer Ymchwil Gofal Cynddeithasol ac Iechyd, Llywodraeth Cymru



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21 June 2013

Mr Graham Thew
Trainee Clinical Psychologist
Taunton and Somerset NHS Foundation Trust
Department of Clinical Psychology
University of Bath
Claverton Down, Bath
BA2 7AY

Dear Mr Thew

| | |
|-------------------------|---|
| Study title: | Thinking about the Self: Investigating phenomenological and transdiagnostic aspects of self-criticism. |
| REC reference: | 13/WA/0158 |
| IRAS project ID: | 119412 |

Thank you for your letter of the 20 June 2013, responding to the Committee's request for further information on the above research, and for submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

We plan to publish your research summary wording for the above study on the NRES website, together with your contact details, unless you expressly withhold permission to do so. Publication will be no earlier than three months from the date of this favourable opinion letter. Should you wish to provide a substitute contact point, require further information, or wish to withhold permission to publish, please contact the REC Co-ordinator, Carl Phillips, Carl.phillips@wales.nhs.uk.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation [as revised], subject to the conditions specified below.

Ethical review of research sites

NHS sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

- Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.
- Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.
- Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at <http://www.rdforum.nhs.uk>.
- Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.
- For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.
- Sponsors are not required to notify the Committee of approvals from host organisations
- **It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).**

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

| Document | Version | Date |
|--|--------------------|---------------|
| Advertisement | 2 | 16 June 2013 |
| Evidence of insurance or indemnity | UMAL | 11 July 2012 |
| Evidence of insurance or indemnity | UMAL | 11 July 2012 |
| Investigator CV | J Gregory | 01 June 2013 |
| Letter from Sponsor | University of Bath | 18 April 2013 |
| Other: Visual Analogue Scales - Current Feelings | 4 | 29 March 2013 |
| Other: Supporting Questions for Interview | 2 | 29 March 2013 |
| Other: CV | A Jones | |
| Other: CV | Dr K Rimes | 01 March 2013 |
| Other: CV | G R Thew | 01 May 2013 |
| Other: CV | Prof G Lewis | |
| Other: Revised Introduction page to Questionnaire Pack | 4 | 09 June 2013 |
| Participant Consent Form | 3 | 20 June 2013 |
| Participant Information Sheet | 5 | 20 June 2013 |
| Protocol | 2 | 15 April 2012 |
| Questionnaire: Questionnaire Pack | 3 | 11 April 2013 |
| REC application | 3.5 | 02 May 2013 |
| Response to Request for Further Information | G Thew | 16 June 2013 |

| | | |
|---|--------|--------------|
| Response to Request for Further Information | G Thew | 20 June 2013 |
|---|--------|--------------|

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document "*After ethical review – guidance for researchers*" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

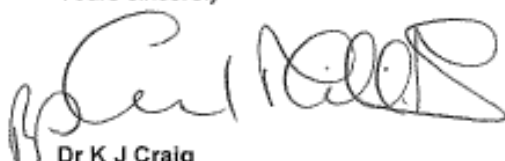
Further information is available at National Research Ethics Service website > After Review

| | |
|-------------------|---|
| 13/WA/0158 | Please quote this number on all correspondence |
|-------------------|---|

We are pleased to welcome researchers and R & D staff at our NRES committee members' training days – see details at <http://www.hra.nhs.uk/hra-training/>

With the Committee's best wishes for the success of this project.

Yours sincerely



Dr K J Craig
Chair, South East Wales Research Ethics Committee D

Enclosures: "After ethical review – guidance for researchers" [SL-AR2]

Copied:- Mr GThew, grt22@bath.ac.uk

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Ms C Hook, Avon and Wiltshire Mental Health Partnership NHS Trust,
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Appendix XI - Main Research Project: Guidance for Authors, Behaviour Research and Therapy



BEHAVIOUR RESEARCH AND THERAPY

AUTHOR INFORMATION PACK

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| • | Editorial Board | p.2 |
| • | Guide for Authors | p.4 |



ISSN: 0005-7967

DESCRIPTION

Behaviour Research and Therapy encompasses all of what is commonly referred to as **cognitive behaviour therapy** (CBT). The focus is on the following: theoretical and experimental analyses of **psychopathological processes** with direct implications for prevention and treatment; the development and evaluation of empirically-supported interventions; predictors, moderators and mechanisms of behaviour change; and dissemination and implementation of evidence-based treatments to general clinical practice. In addition to traditional **clinical disorders**, the scope of the journal also includes **behavioural medicine**. The journal will not consider manuscripts dealing primarily with measurement, psychometric analyses, and personality assessment.

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INTRODUCTION

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